<ART-052-0>

SERVICE MANUAL

AM/FM STEREO RECEIVER

SX-636

KCU, FV, GN

NOTE:

THE MODEL SX-636 COMES IN THREE VERSIONS DISTINGUISHED AS FOLLOWS:

Round label on rear panel	Voltage	Type
KCU	120V only	UL (U.S.A.) and CSA (Canada) approved.
GN	220V only	SEMCO (Sweden) DEMCO (Denmark) and NEMCO (Norway) approved.
FV	110V, 120V, 130V, 220V and 240V (switchable)	General export model.

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PIONEER®

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1. SPECIFICATIONS

SEMICONDUCTORS

FET 1
ICs 3
Transistors 33
Diodes 17

AMPLIFIER SECTION

Continuous Power Output
20Hz~20kHz (Both channels driven) . . . 25W + 25W (8Ω:Rated power), 27W + 27W (4Ω)
1kHz (Both channels driven) . . . 27W + 27W (8Ω), 30W + 30W (4Ω)
Harmonic Distortion
(20Hz~20kHz Continuous Power Output . . . . . Less than 0.5%
(1W + 1W, Power Output) . . . . . Less than 0.07%
Intermodulation Distortion
(Continuous Power Output) . . . . Less than 0.5%
(1W + 1W, Power Output) . . . . . Less than 0.07%
Power Bandwidth
(IHF, Both channels driven) . . . . 5Hz~60kHz (T.H.D. 0.5%)
Output Speaker . . . . . A, B, A + B, (4Ω ~ 16Ω)
Headphone . . . . . 4Ω ~ 16Ω
Damping Factor (1kHz, 8Ω) . . . . . More than 35
Residual Hum & Noise
(8Ω, Pre & Power amplifier) . . . . Less than 0.5mV
Input Sensitivity/Impedance
PHONO 2.5mV/50kΩ
PHONO Overload Level (rms/p-p) . 110mV/310mV
MIC 7mV/85kΩ
AUX 150mV/60kΩ
TAPE PB 1, 2 . . . . . 150mV/60kΩ
TAPE PB 2 (DIN connector) 150mV/60kΩ
Output Level/Impedance
TAPE REC 1, 2 . . . . . 150mV
TAPE REC 2 (DIN connector) . . . 30mV/80kΩ
Frequency Response
PHONO (RIAA equalization) . . . . 30Hz ~ 15kHz ±0.5dB
AUX, TAPE PB . . . . . 20Hz ~ 30kHz $^{+0}_{-1}{}^{.5}$ dB
Filter
HIGH . . . . . –9dB (10kHz) 6dB/oct
Tone Control
BASS . . . . . ±10dB (100Hz)
TREBLE . . . . . ±10dB (10kHz)
Loudness Contour (Volume control set at –40dB position) . . . . . +9dB (100Hz), +5dB (10kHz)
Hum & Noise (IHF, short-circuited, A Network)
PHONO . . . . . More than 70dB
MIC . . . . . More than 65dB
AUX, TAPE PB . . . . . More than 90dB

FM SECTION

Usable Sensitivity (IHF) 1.9μV
Capture Ratio (IHF) 1.0dB
Selectivity (IHF) 60dB
Signal-to-Noise Ratio 70dB
Image Rejection (98MHz) 60dB
IF Rejection (98MHz) 90dB
Spurious Rejection 75dB
AM Suppression 50dB
Harmonic Distortion: MONO . . . . . Less than 0.2%
STEREO . . . Less than 0.4%
Frequency Response . . . . . 20Hz ~ 15kHz $^{+0.2}_{-2.0}$ dB
50Hz ~ 10kHz $^{+0.2}_{-0.5}$ dB
Stereo Separation: 1kHz . . . . . More than 40dB
50Hz ~ 10kHz . . More than 30dB
Sub Carrier Suppression 40dB
Antenna Input . . . . . 300Ω Balanced, 75Ω Unbalanced
Muting . . . . . ON–OFF

AM SECTION

Sensitivity (IHF, Ferrite antenna) . . 300μV/m
(IHF, Ext. antenna) 15μV
Selectivity 35dB
Signal-to-Noise Ratio 50dB
Image Rejection 40dB
IF Rejection 70dB

MISCELLANEOUS

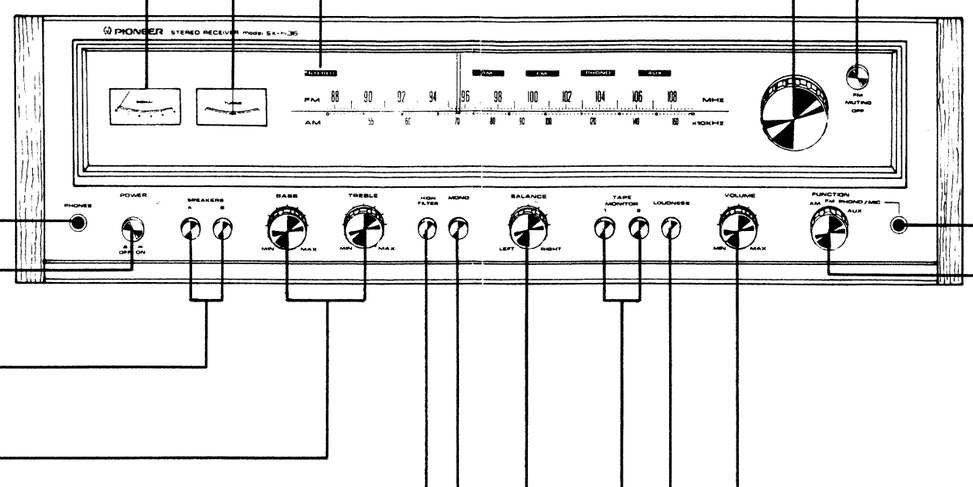
Power Requirements . . . . . AC 120V 60Hz, 220V 50/60Hz
or 110, 120, 130, 220 and 240V (switchable) 50/60Hz
Power Consumption . . . . . 140W (UL approved model only), 220W (Others model)
Dimensions . . . . . 480 (W) x 147 (H) x 405 (D) mm
18-7/8 x 5-13/16 x 15-15/16 in.
Weight: Without Package . . . . . 11.2kg (24 lb 10 oz)
With Package . . . . . 13.0kg (28 lb 10 oz)

FURNISHED PARTS

FM T-type Antenna 1
Operating Instructions 1
Fuse 3A . . . . . 1 (5 line voltage model only)
Fuse 1.5A . . . . . 1 (5 line voltage model only)

NOTE:
Specifications and the design subject to possible modification without notice due to improvements.

2. FRONT PANEL FACILITIES



SIGNAL METER

Tune in both AM and FM stations for maximum deflection of the meter indicator to the right.

FM TUNING METER

When tuning in an FM station, first employ the SIGNAL meter, then perform fine tuning adjustment in order to center the needle of this meter.

FM STEREO INDICATOR

Lights when stereophonic FM broadcast is being received.

TUNING CONTROL

Turn this knob to tune in desired broadcast station.

PHONES JACK

For plugging in stereo headphones. A wide variety of high quality headphones are available from Pioneer.

FM MUTING BUTTON

Leave this button undepressed (ON) when listening to FM broadcasts. This will suppress inter-station noise and weak interfering stations when tuning in a desired station. If the desired station is weak, however, push this button to the OFF (depressed) position.

POWER BUTTON

AC power is turned on by pushing this switch to ON.

MIC JACK

Accepts the plug of the microphone. When a microphone is connected to the MIC jack, the turntable connected to PHONO terminals cannot be used. Use a high-impedance microphone with a standard plug.

SPEAKER BUTTONS

Buttons for selecting A or B speaker system connected to A or B output terminals.

A: Speaker system A operates
B: Speaker system B operates

NOTES:

1. *When employing headphones, speakers can be turned off by setting the SPEAKERS buttons to the OFF (undepressed) position.*
2. *Two pairs (A, B) of speaker systems can be used at the same time with A and B switches pushed.*

FUNCTION SWITCH

Selects desired program source.

AM: AM reception.
FM: FM reception with automatic switching for stereo or mono programs. The STEREO Indicator lights when the broadcast is in stereo.
PHONO/MIC: When playing records or using a microphone.
AUX: To play component connected to the AUX input jacks.

BASS & TREBLE CONTROLS

Adjust bass and treble. Flat response is obtained at center of rotation. Turning the controls clockwise or counterclockwise from center will boost or diminish the tone as desired.

VOLUME CONTROL

Adjusts sound volume of both speakers and headphones. Clockwise rotation increases volume.

HIGH FILTER BUTTON

Push this button to ON (undepressed position) when high pitched noise, such as record scratch noise, is objectionable. At other times, set this button to OFF.

BALANCE CONTROL

Adjusts balance between left and right speakers. When turned clockwise, left channel volume decreases while right channel volume increases. Turning the control counterclockwise has the opposite effect.

TAPE MONITOR (1 & 2) BUTTONS

These buttons permit the recorded sound to be monitored when recording with a tape deck. They also allow listening to tapes (playback).

1 . . . . . Push this button when tape deck connected to TAPE 1 (REC & PB) jacks are being used for playback, or for monitoring a recording in progress.
2 . . . . . Push this button when tape deck connected to TAPE 2 (REC & PB or REC/PB DIN connector) jacks are being used for playback, or for monitoring a recording in progress.

LOUDNESS BUTTON

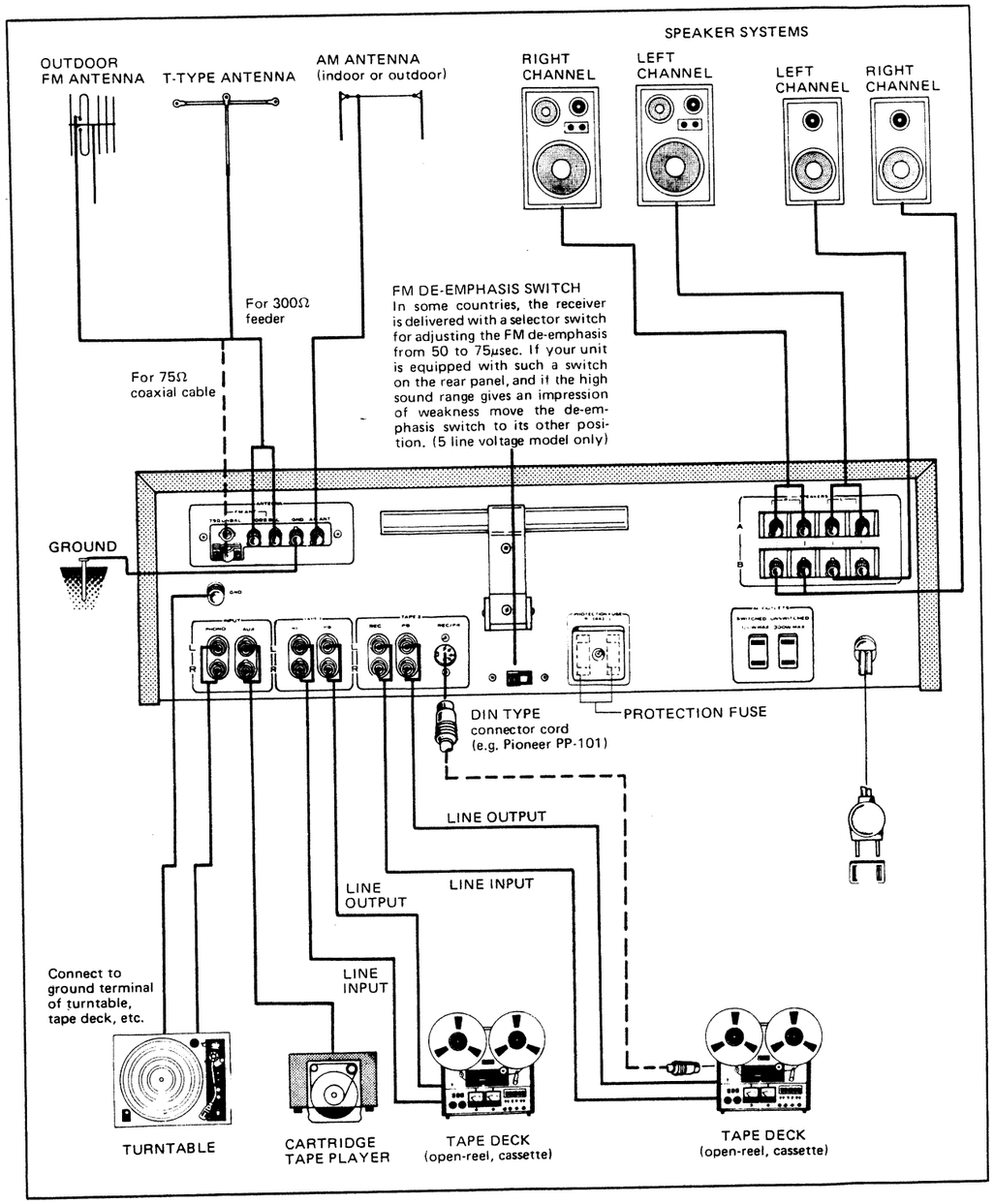
Compensates for human ear response to low sound volumes. Push this button to ON (depressed position) to enhance low and high frequencies when listening at low volume levels.

MODE BUTTON

Selects stereo or mono sound.

STEREO: Leave it undepressed.
MONO: Depress it for monophonic sound into which the left and right channel signals blend.

3. CONNECTION DIAGRAM


SPEAKER SYSTEMS
OUTDOOR FM ANTENNA
T-TYPE ANTENNA
AM ANTENNA (indoor or outdoor)
RIGHT CHANNEL
LEFT CHANNEL
LEFT CHANNEL
RIGHT CHANNEL
For 300Ω feeder
For 75Ω coaxial cable
FM DE-EMPHASIS SWITCH
In some countries, the receiver is delivered with a selector switch for adjusting the FM de-emphasis from 50 to 75μsec. If your unit is equipped with such a switch on the rear panel, and it the high sound range gives an impression of weakness move the de-emphasis switch to its other position. (5 line voltage model only)
GROUND
DIN TYPE connector cord (e.g. Pioneer PP-101)
PROTECTION FUSE
LINE OUTPUT
LINE INPUT
LINE OUTPUT
LINE INPUT
Connect to ground terminal of turntable, tape deck, etc.
TURNTABLE
CARTRIDGE TAPE PLAYER
TAPE DECK (open-reel, cassette)
TAPE DECK (open-reel, cassette)

Line Voltage And Fuse And Rear Panel

Each design of LINE VOLTAGE and FUSE of this model differs according to each destination to be delivered.
How to operate the SX-636 is quite the same for each version. However, each rear panel differs according to LINE VOLTAGE and FUSE design for each version.
Fig. A shows the LINE VOLTAGE of a 120V only model.
Fig. B shows the LINE VOLTAGE of a 220V only model.
Fig. C shows a 5 line voltage (110V, 120V, 130V, 220V and 240V) model whose LINE VOLTAGE and FUSE can be changed and set as follows:

Changing Line Voltage Setting And Fuse (Fig. D)

To remove the fuse, turn the fuse cap located on the line voltage selector in the direction indicated by the arrow. Then remove the fuse plug from the unit. Put the fuse plug back so that the proper line voltage marking can be seen through the cut in the edge of the plug. Whenever the position of the selector is changed, check the rating of the fuse. A 1.5A fuse is to be used for either 220V or 240V operation and a 3A fuse rating for 110V, 120V or 130V operation. If the rating of the fuse is correct, replace cap.

Fuse Replacement

When the fuse blows, remove the fuse cap and replace the fuse with a new one.

120V model

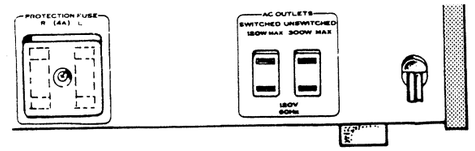


Fig. A

220V model

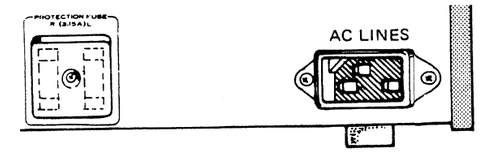


Fig. B

5 Line Voltage model

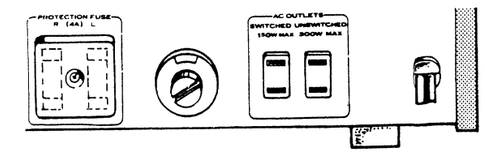


Fig. C

Line Voltage and Fuse

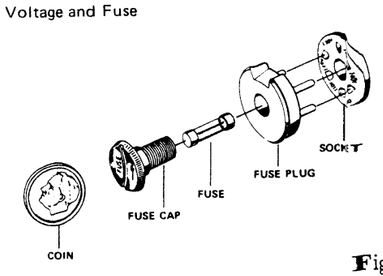
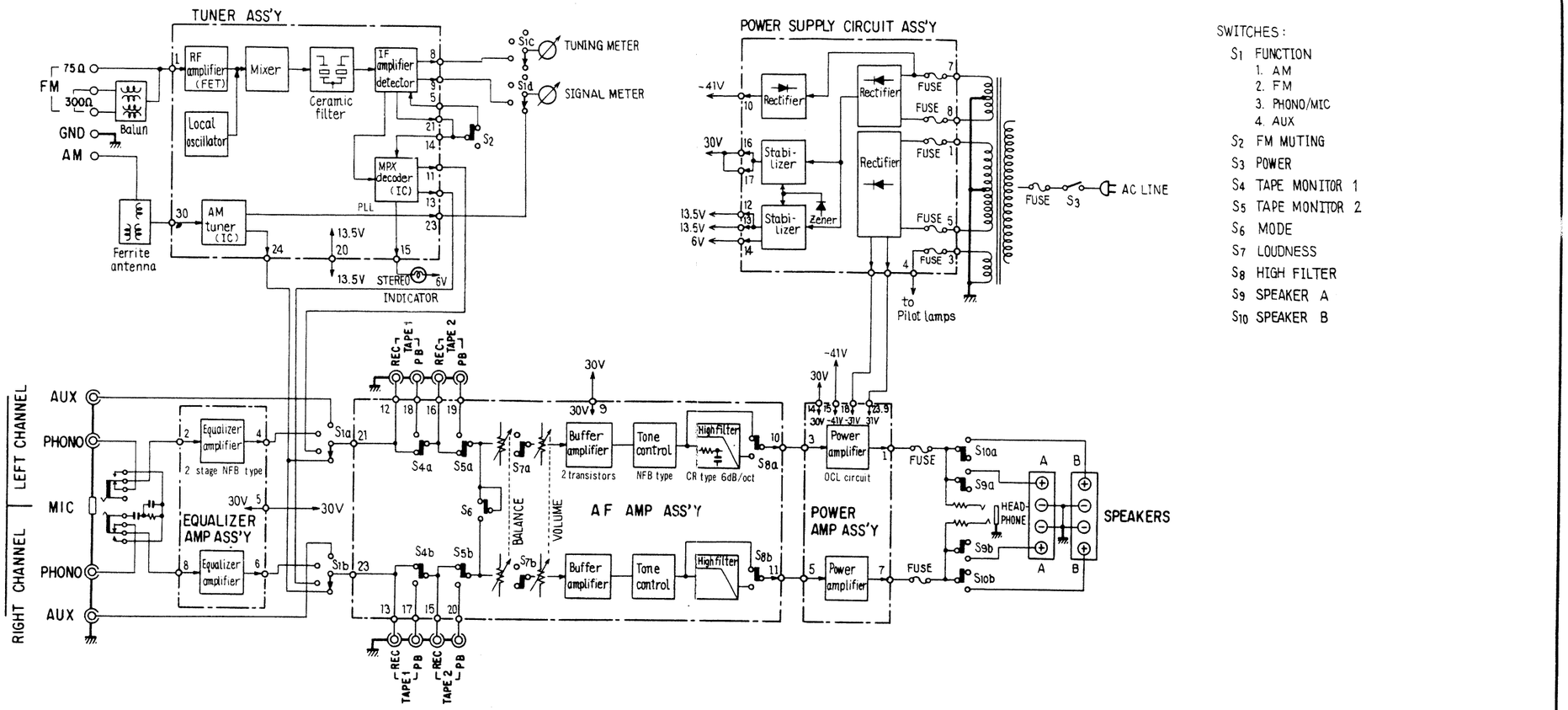
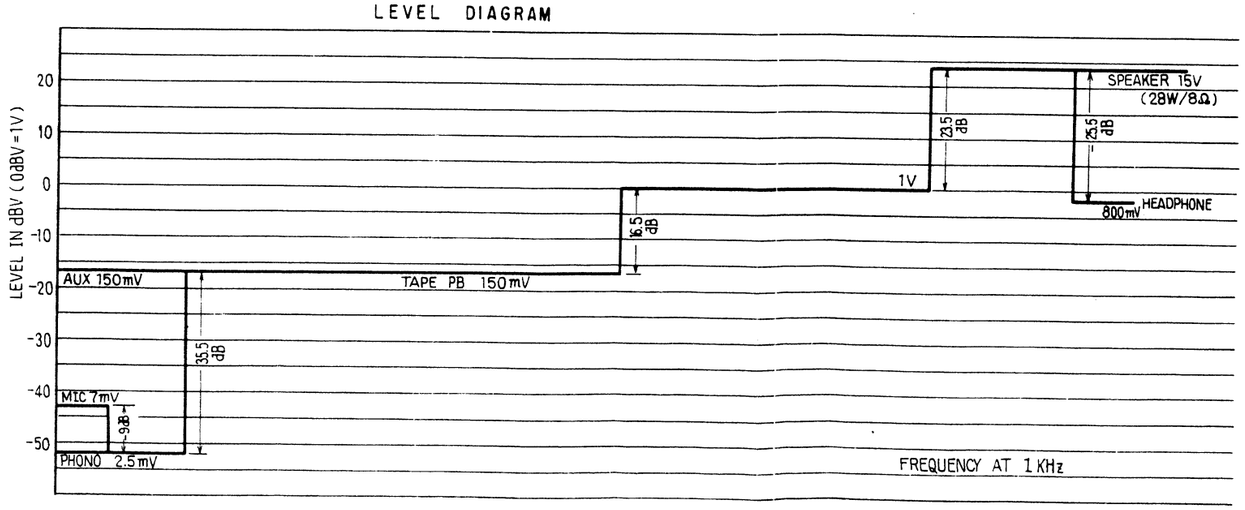


Fig. D

4. BLOCK DIAGRAM AND LEVEL DIAGRAM

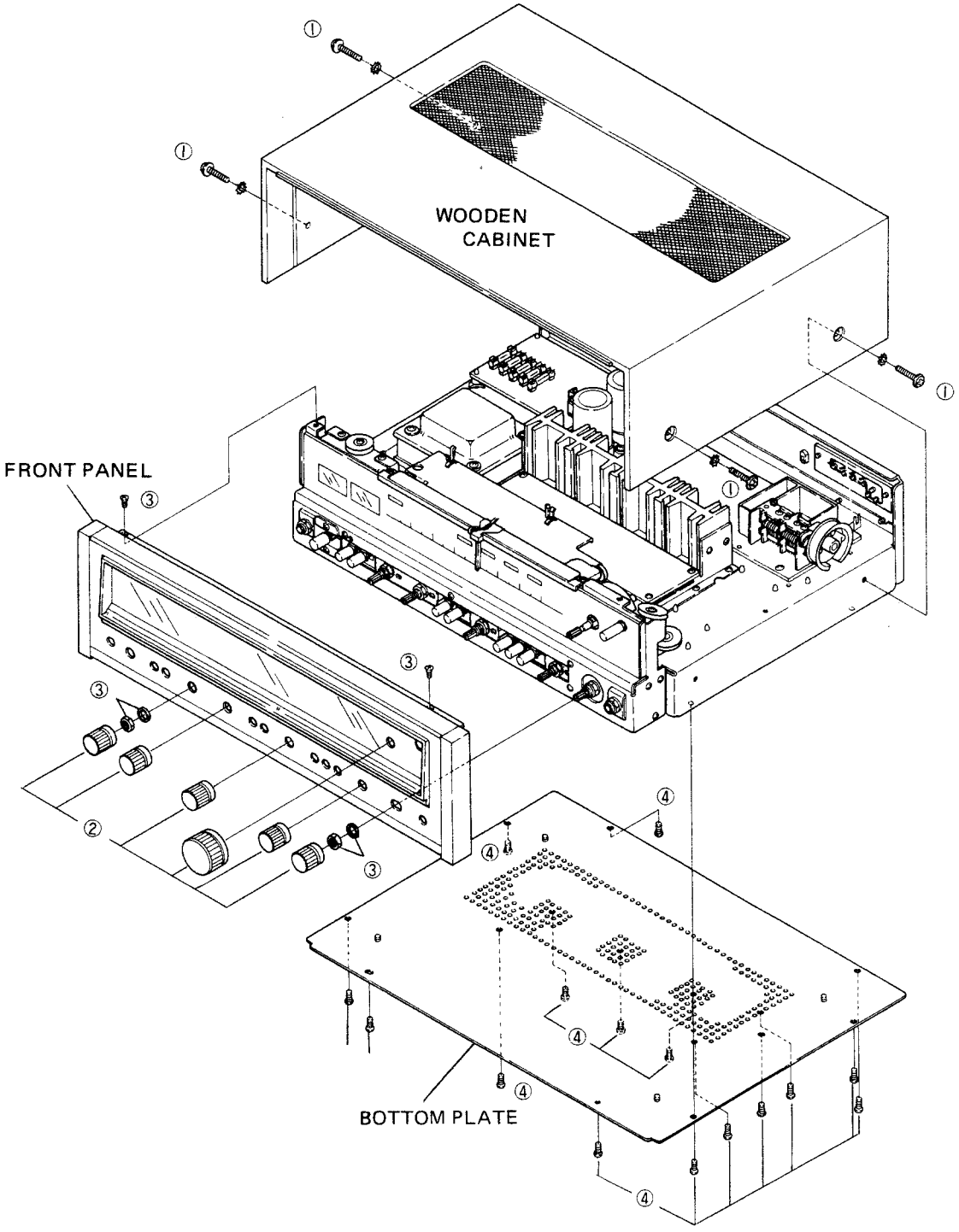


LEVEL DIAGRAM



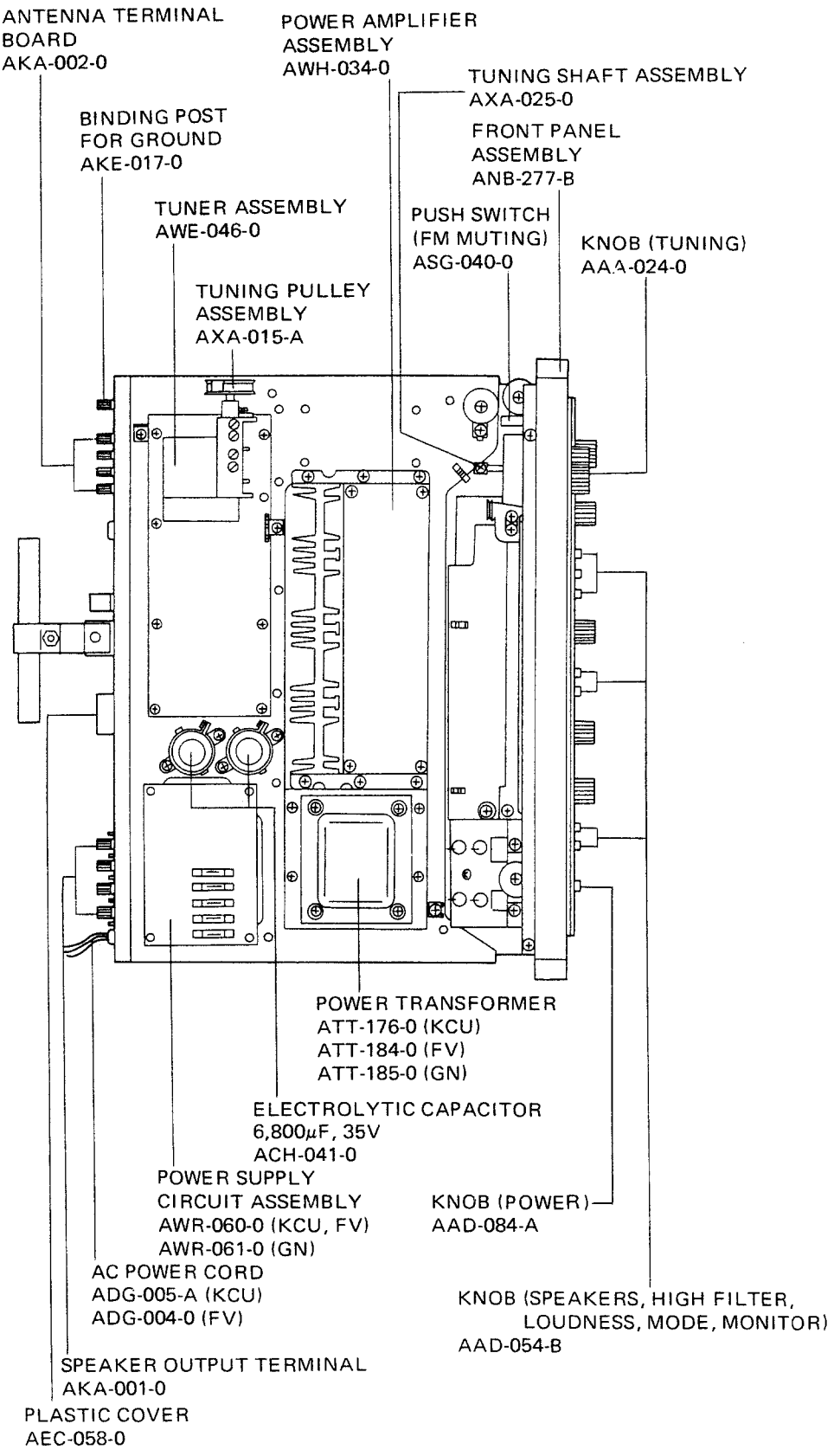
5. DISASSEMBLY

1. To remove the wooden cabinet, remove 2 screws each fastening either side and lift the cabinet while sliding it backwards.
2. Pull off all the knobs.
3. To remove the front panel, remove 2 screws fastening its top and nuts and washers holding each of BASS, BALANCE and FUNCTION control shafts.
4. To remove the bottom plate, remove a total of 15 screws.

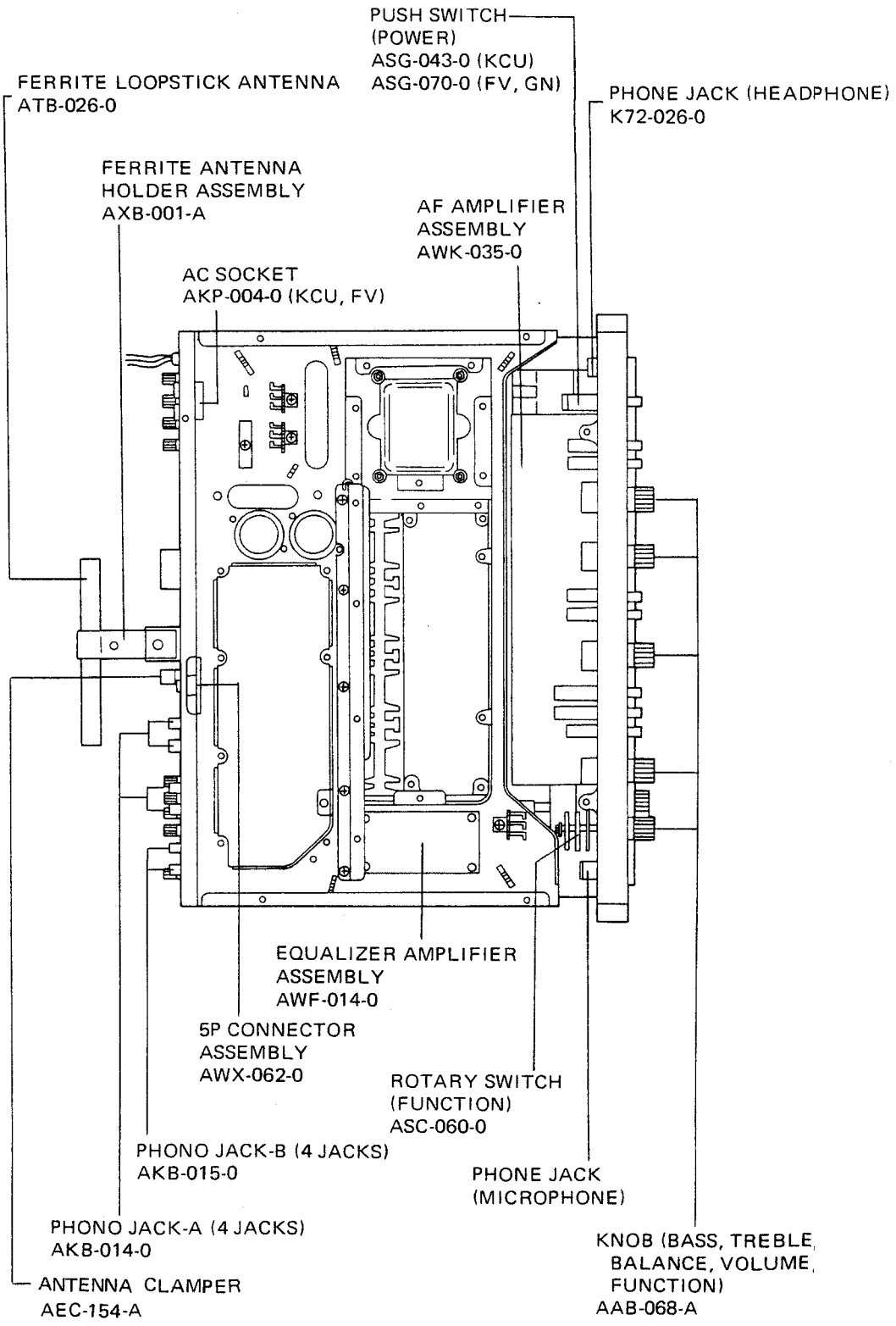


6. PARTS AND P.C. BOARD LOCATION

Top View

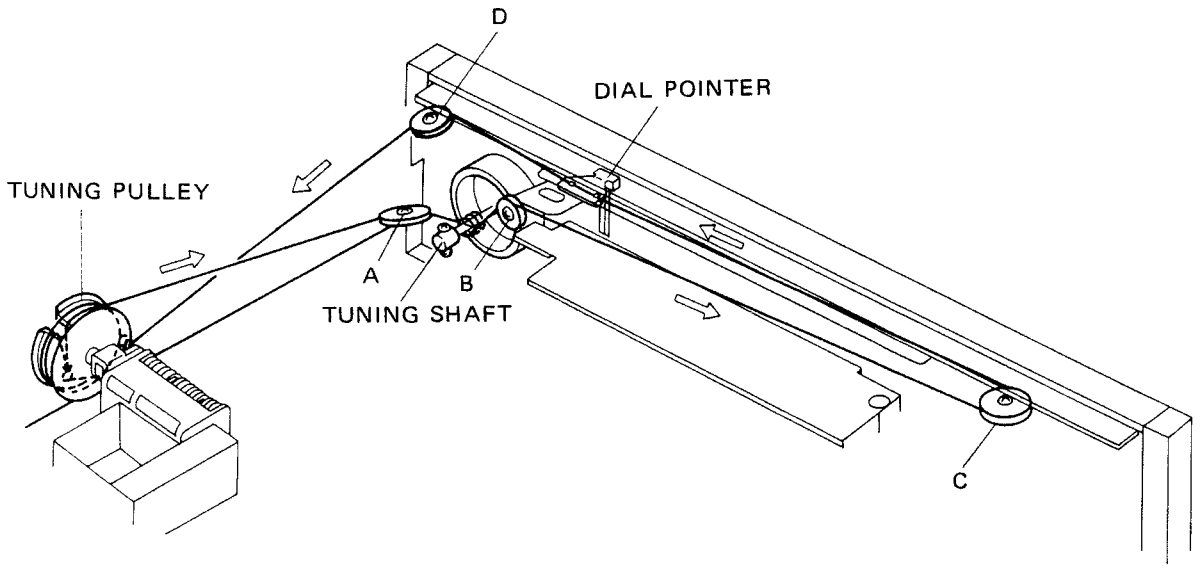

ANTENNA TERMINAL BOARD AKA-002-0
POWER AMPLIFIER ASSEMBLY AWH-034-0
TUNING SHAFT ASSEMBLY AXA-025-0
BINDING POST FOR GROUND AKE-017-0
FRONT PANEL ASSEMBLY ANB-277-B
TUNER ASSEMBLY AWE-046-0
PUSH SWITCH (FM MUTING) ASG-040-0
KNOB (TUNING) AAA-024-0
TUNING PULLEY ASSEMBLY AXA-015-A
POWER TRANSFORMER ATT-176-0 (KCU) ATT-184-0 (FV) ATT-185-0 (GN)
ELECTROLYTIC CAPACITOR 6,800μF, 35V ACH-041-0
POWER SUPPLY CIRCUIT ASSEMBLY AWR-060-0 (KCU, FV) AWR-061-0 (GN)
KNOB (POWER) AAD-084-A
AC POWER CORD ADG-005-A (KCU) ADG-004-0 (FV)
KNOB (SPEAKERS, HIGH FILTER, LOUDNESS, MODE, MONITOR) AAD-054-B
SPEAKER OUTPUT TERMINAL AKA-001-0
PLASTIC COVER AEC-058-0

Bottom View


PUSH SWITCH
(POWER)
ASG-043-0 (KCU)
ASG-070-0 (FV, GN)
FERRITE LOOPSTICK ANTENNA
ATB-026-0
PHONE JACK (HEADPHONE)
K72-026-0
FERRITE ANTENNA
HOLDER ASSEMBLY
AXB-001-A
AF AMPLIFIER
ASSEMBLY
AWK-035-0
AC SOCKET
AKP-004-0 (KCU, FV)
EQUALIZER AMPLIFIER
ASSEMBLY
AWF-014-0
5P CONNECTOR
ASSEMBLY
AWX-062-0
ROTARY SWITCH
(FUNCTION)
ASC-060-0
PHONO JACK-B (4 JACKS)
AKB-015-0
PHONE JACK
(MICROPHONE)
PHONO JACK-A (4 JACKS)
AKB-014-0
KNOB (BASS, TREBLE,
BALANCE, VOLUME,
FUNCTION)
AAB-068-A
ANTENNA CLAMPER
AEC-154-A

7. DIAL CORD STRINGING

1. Turn the tuning knob until the plates of the tuning capacitor are as far out as possible.
2. Fasten one end of the cord to the spring on the tuning pulley and lead it round pulley A.
3. Wind the cord 3 turns round the tuning shaft and run it round pulleys B, C and D.
4. Wind the cord 1-1/2 turns round the dial pulley and tie the end to the spring while tensioning the spring slightly. Trim off excess cord.
5. Turn the tuning knob fully clockwise and fix the dial pointer to the cord at the point where it indicates "10" on the dial scale.



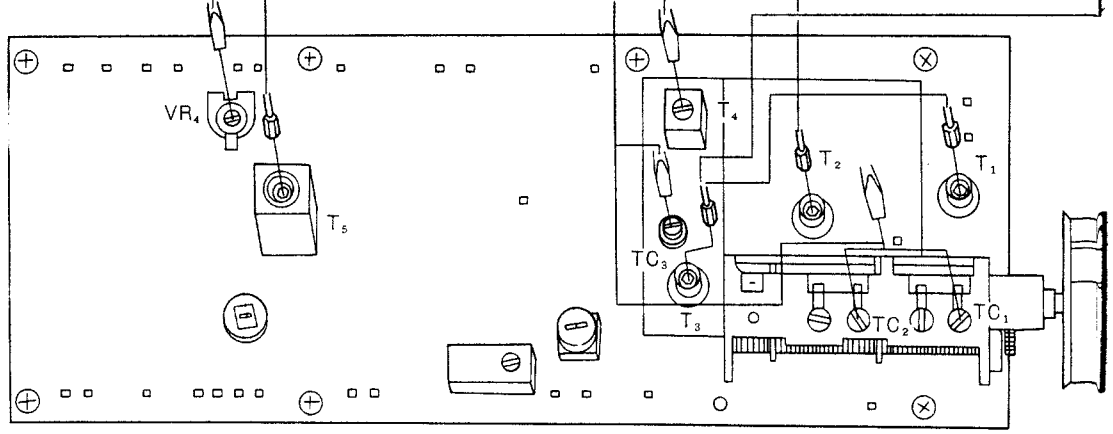
8. ADJUSTMENTS

FM Section

1. Switch positions on the SX-636:
   FUNCTION . . . . . FM
   FM MUTING . . . . . OFF (pressed in)
   POWER . . . . . ON
2. Connection of instruments:
   FM Signal Generator (FM SG) . . . . Connect to FM ANTENNA terminals through 300Ω dummy antenna.
   AC Voltmeter, Distortion meter, Oscilloscope . . . . . Connect in parallel to TAPE REC jack.
3. Set FM SG to 100% modulation (±75kHz deviation) at 400Hz and 100dB output.
4. Tune FM SG and SX-636 to dial readings of 87.4MHz (left scale end) and adjust T3 so that signal meter makes maximum deflection.
5. Adjust T5 (lower core) so that tuning meter points to the center.
6. Set FM SG output to 8 ~ 10dB and adjust T1 T2 and T3 to maximize audio frequency output level.
7. Tune FM SG and SX-636 to dial readings of 106MHz and adjust TC3 so that signal meter makes maximum deflection when FM SG output is 100dB.
8. Set FM SG output to 8~10dB and adjust TC1, TC2 and TC3 to maximize audio frequency output level.
9. Tune FM SG and SX-636 to dial readings of 90MHz and adjust T4 so that signal meter makes maximum deflection when FM SG output is 100dB.
10. Set FM SG output to 8 ~ 10dB and adjust T1 and T2 to maximize audio frequency output level.

- Repeat steps 7 through 10 so that output is maximized when the dial indicates the given frequencies.

11. Tune FM SG and SX-636 to dial readings of 90MHz and adjust T4 to maximize audio frequency output level when FM SG output is 8~10dB.
12. Detune SX-636 so that only noise is received.
13. Adjust T5 (lower core) so that tuning meter points to the center.
14. Tune FM SG and SX-636 to dial readings of 98MHz. Fine tune SX-636, observing tuning meter.
15. Set FM SG output to 60dB and adjust T5 (upper core) to minimize distortion.
16. Set FM SG output to 100dB and adjust VR4 so that signal meter readings 5.

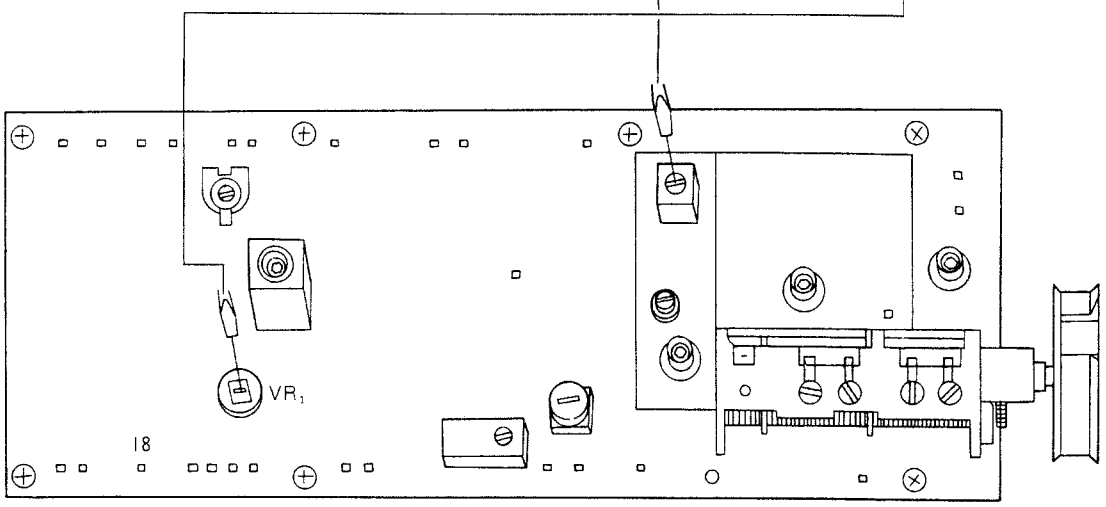


TUNER ASSEMBLY (AWE-046)

FM MPX Section

- The SX-636 incorporates a PLL demodulator circuit. This adjustment should only be made when MPX IC has been replaced.
- This adjustment should be made after completion of FM section adjustment.

1. Switch positions on the SX-636:
   FUNCTION . . . . . FM
   FM MUTING . . . . . OFF (pressed in)
   POWER . . . . . ON
2. Connection of instruments:
   FM Signal Generator (FM SG) . . . . Connect to FM ANTENNA terminals through 300Ω dummy antenna.
   MPX Signal Generator (MPX SG) . . Connect to FM SG's external modulator terminals.
   Oscilloscope . . . . . Connect horizontal input to MPX SG's PILOT OUT terminals and vertical input to No. 18 terminal of tuner assembly.
   Distortion meter . . . . . Connect to TAPE REC jack.
3. Tune FM SG and SX-636 to dial readings of 98MHz.
4. Set MPX SG to ±67.5kHz deviation at 1kHz for left and right channels and FM SG output to 60dB.
5. Produce a Lissajous pattern on oscilloscope and adjust VR1 to make the pattern still.
6. Set MPX SG to ±67.5kHz deviation at 1kHz for left and right channels and to ±7.5kHz deviation for 19kHz pilot signal. Set FM SG output to 60dB.
7. Adjust T4 to minimize distortion of audio frequencies for left or right channel.

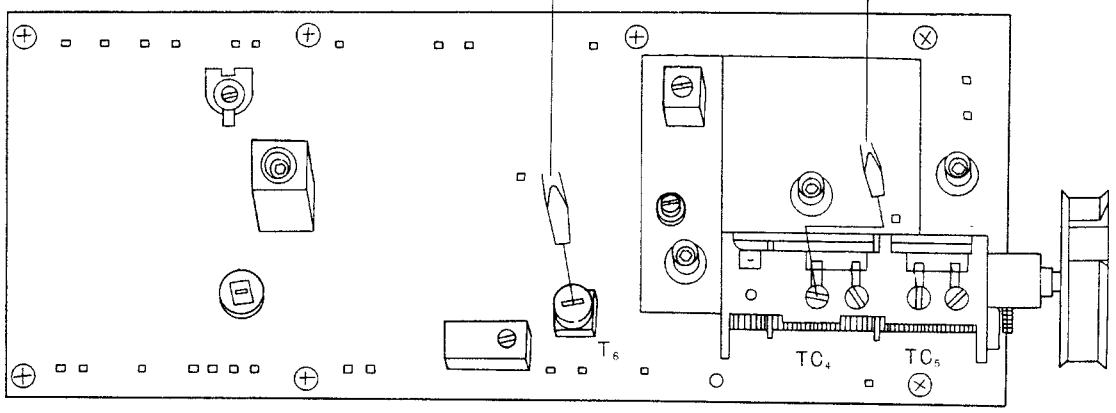


TUNER ASSEMBLY (AWE-046)

AM Section

1. Switch positions on the SX-636:
   FUNCTION . . . . . AM
   POWER . . . . . ON
2. Connection of instruments:
   AM Signal Generator (AM SG) . . . . Connect to AM ANTENNA terminals in series with dummy antenna (1kΩ resistor).
   AC Voltmeter . . . . . Connect to TAPE REC jack.
3. Set AM SG to 30% modulation at 400Hz and 30dB output.
4. Tune AM SG and SX-636 to dial readings of 600kHz and adjust T6 to maximize audio frequency output level. (Adjust core of ferrite loopstick antenna at the same time.)
5. Tune AM SG and SX-636 to dial readings of 1,400kHz and adjust TC4 and TC5 to maximize audio frequency output level.

- Repeat steps 4 and 5 so that output is maximized when the dial indicates these frequencies.

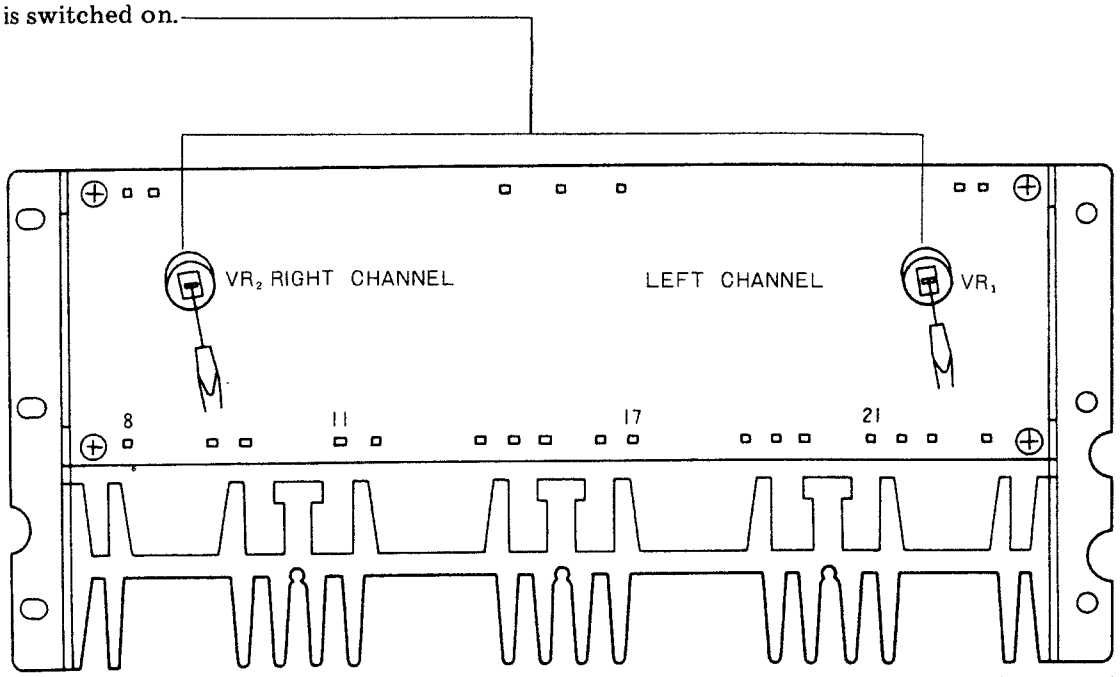


TUNER ASSEMBLY (AWE-046)

Power Amplifier

- Do this adjustment when any of the transistors in the power amplifier has been replaced.
- Terminal and VR numbers given first are for the left channel and those in brackets are for the right channel.

1. Switch positions on the SX-636:
   FUNCTION . . . . . AUX
   POWER . . . . . ON
   SPEAKER . . . . . A (A button pressed in)
2. Connect 8Ω dummy load to SPEAKER A terminals. (Keep AUX jacks free.)
3. Connect DC voltmeter between No. 21 (8) and No. 17 (11) terminals.
4. Adjust VR1(VR2) so that voltmeter reads 20mV at 10 minutes after power is switched on.



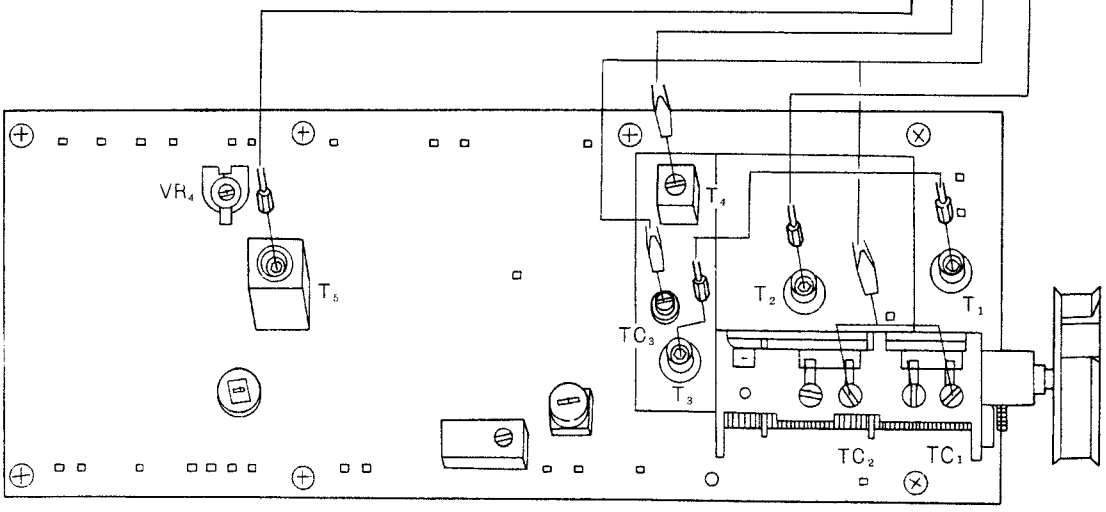
POWER AMPLIFIER ASSEMBLY (AWH-034)

ABGLEICHVERFAHREN

ABGLEICHEN DES FM-TEILS

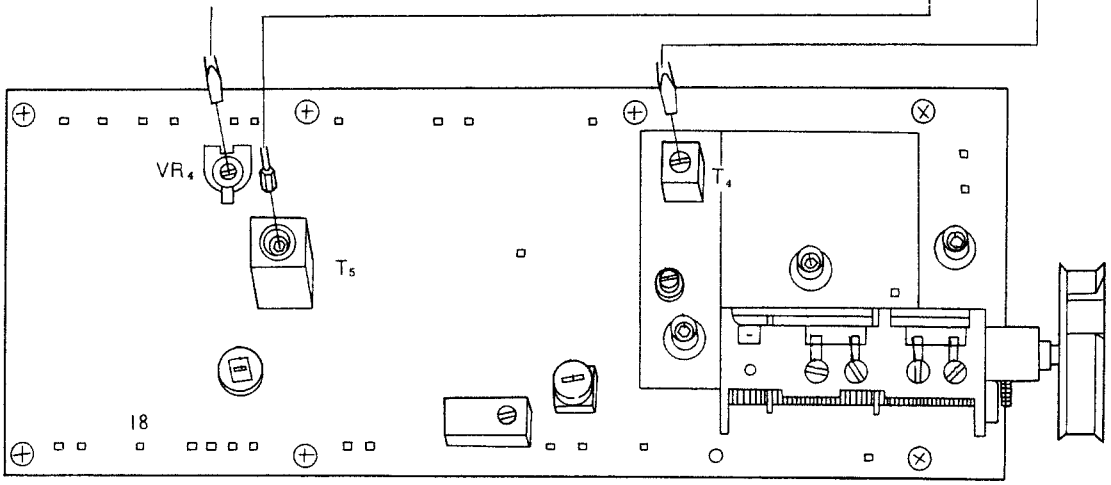
1. Regeleinstellungen am SX-636
   FUNCTION (Programmquellen-Wählschalter): FM (UKW)
   FM MUTING (FM-Otummabstimmung): OFF (Niedergedrückt)
   POWER (Stromschalter): ON (Ein)
2. Anschließen des Prüfsatzes
   FM-Prüfsender (FM SG) . . . . . Ist über eine 300-Ohm-Ersatzantenne an die mit FM ANTENNA (UKW-Antenne) bezeichneten Anschlüsse anzuschließen.
   Wechselspannungsmesser . . . . . Sind parallelgeschaltet an die Anschlußbuchsen
   Klirrfaktormeßgerät, Oszilloskop TAPE REC (Band/Aufnahme) anzuschließen.
3. Der Ausgangspegel des FM-Prüfsenders ist, 100% moduliert bei 400 Hz bei einer Frequenzabweichung von ±75 kHz, auf 100 dB einzustellen.
4. Der FM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 87,4 MHz (Linkes Ende der Skalen)einzustellen, wobei T3 so zu justieren ist, daß die Nadel des Signalmeßgerätes ganz nach rechts ausschlägt.
5. T5 (unterer Kern) ist zu drehen und so einzustellen, daß die Nadel des Abstimm-Meters zentriert ist.
6. Der FM-Prüfsender ist auf einen Ausgang von 8 — 10 dB einzustellen und T1, T2 und T3 sind zu drehen und auf einen maximalen Hörfrequenz-Ausgangspegel einzustellen.
7. Der FM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 106 MHz einzustellen und TC3 ist so zu justieren, daß die Nadel des Signalmeßgerätes ganz nach rechts ausschlägt, wenn der FM-Prüfsender-Ausgang 100 dB beträgt.
8. Der FM-Prüfsender ist auf einen Ausgang von 8 — 10 dB einzustellen und TC1, TC2 und TC3 sind zu drehen und auf einen maximalen Hörfrequenz-Ausgangspegel einzustellen.
9. Der FM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 90 MHz einzustellen und T4 ist so zu justieren,dap-die Nadel des Signalmeßgerätes ganz nach rechts ausschlägt, wenn der FM-Prüfsender-Ausgang 100 dB beträgt.
10. Der FM-Prüfsender ist auf einen Ausgang von 8 — 10 dB einzustellen und T1 und T2 sind zu drehen und auf einen maximalen Hörfrequenz-Ausgangspegel einzustellen.

* Obige Schritte 7 —10 sind mehrmals nacheinander zu wiederholen, bis der maximale Ausgang erzielt wird, wenn die angegebenen Frequenzen angezeigt werden.



TUNER-Schaltung (AWE-046)

11. Der FM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 90 MHz einzustellen und T4 ist so zu justieren, daß der maximale Hörfrequenz-Ausgangspegel erzielt wird, wenn der Ausgang des FM-Prüfsenders 8 — 10 dB beträgt.
12. Der SX-636 ist zu verstimmen, so daß nur Geräusche empfangen werden.
13. T5 (unterer Kern) ist zu drehen und so einzustellen, daß die Nadel des Abstimm-Meters zentriert ist.
14. Der FM-Prü sender und der SX-636 sind beide auf eine Anzeige von 98 MHz einzustellen. Die Feinabstimmung des SX-636 ist unter Beachtung des Abstimm-Meters vorzunehmen.
15. Der Ausgang des FM-Prüfsenders ist auf 60 dB einzustellen und T5 (oberer Kern) ist zu drehen und so einzustellen, daß die Verzerrrung minimal wird.
16. Der Ausgang des FM-Prüfsenders ist auf 100 dB einzustellen und VR4 ist so zu justieren, daß das Signalmeßgerät "5" anzeigt.



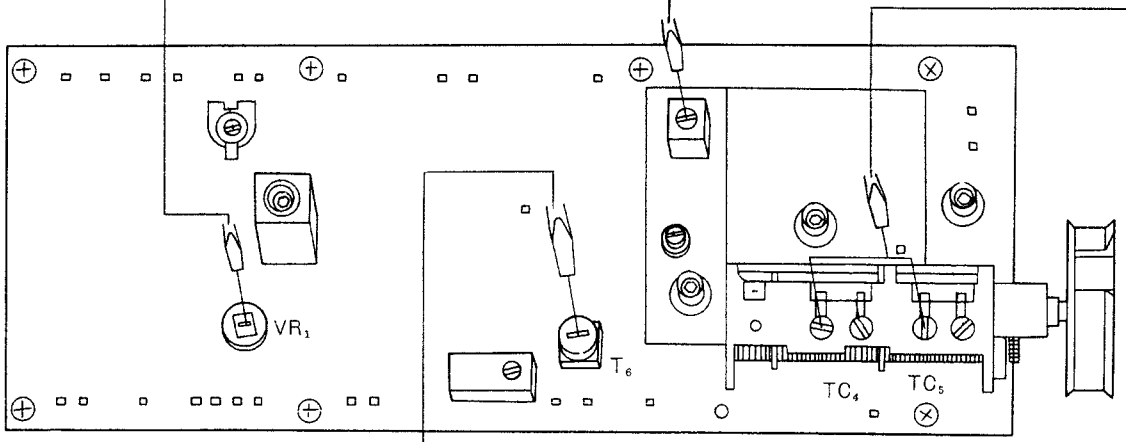
TUNER-Schaltung (AWE-046)

ABGLEICHEN DES FM-MPX-TEILS

* In den SX-636 ist ein PLL-Demodulator-Schaltkreis eingebaut. Diesser Abgleich sollte nur dann durchgeführt werden, wenn der MPX-Integralschaltkreis ausgewechselt wurde.
* Dieser Abgleich sollte nicht vor Beendigung des Abgleichs des FM-Teils durchgeführt werden.

1. Regeleinstellungen am SX-636:
   FUNCTION (Programmquellen-Wählschalter): FM (UKW)
   FM MUTING (FM-Stummabstimmung): OFF (niedergedrück)
   POWER (Stromschalter): ON (Ein)
2. Anschließen des Prüfsatzes:
   FM-Prüfsender (FM SG) . . . . . Ist über eine 300-Ohm-Ersatzantenne an die mit FM ANTENNA (UKW-Antenne) bezeichneten Anschlüsse anzuschliessen.
   Multiplex-Prüfsender (MPX SG) . . . . . Ist an die Außenmodulatoranschlüsse des FM-Prüfsenders anzuschließen.
   Oszilloskop . . . . . Der horizontale Eingang ist mit den mit PILOT OUT (Kontrollausgang) bezeichneten Anschlüssen des Multiplex-Prüfsenders und der vertikale Eingang mit dem Anschluß Nr. 18 der Tuner-Einheit zu verbinden.
   Klirrfaktormeßgerät . . . . . Ist an die Anschlußbuchsen TAPE REC (Band/Aufnahme) anzuschließen.

3. Der FM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 98 MHz einzustellen.
4. Der Multiplex-Prüfsender ist auf eine Abweichung von ± 67,5 kHz bei 1 kHz für die linken und rechten Kanäle und der FM-Prüfsender auf einen Ausgang von 60 dB einzustellen.
5. Auf dem Oszillographen sind Lissajous'sche Schwingungsfiguren zu erzeugen und VR1 ist so einzustellen, daß die Schwingungen festgehalten werden.
6. Der Multiplex-Prüfsender ist auf eine Abweichung von ± 67,5 kHz bei 1 kHz für die linken und rechten Knaäle und auf eine Abweichung von ± 7,5 kHz für das 19-kHz-Steuersignal einzustellen. Der FM-Prüfsender ist auf einen Ausgang von 60 dB einzustellen.
7. T4 ist zu drehen und auf eine minimale Verzerrung der Hörfrequenzen des linken oder rechten Kanales einzustellen.



TUNER-Schaltung (AWE-046)

ABGLEICHEN DES AM-TEILS

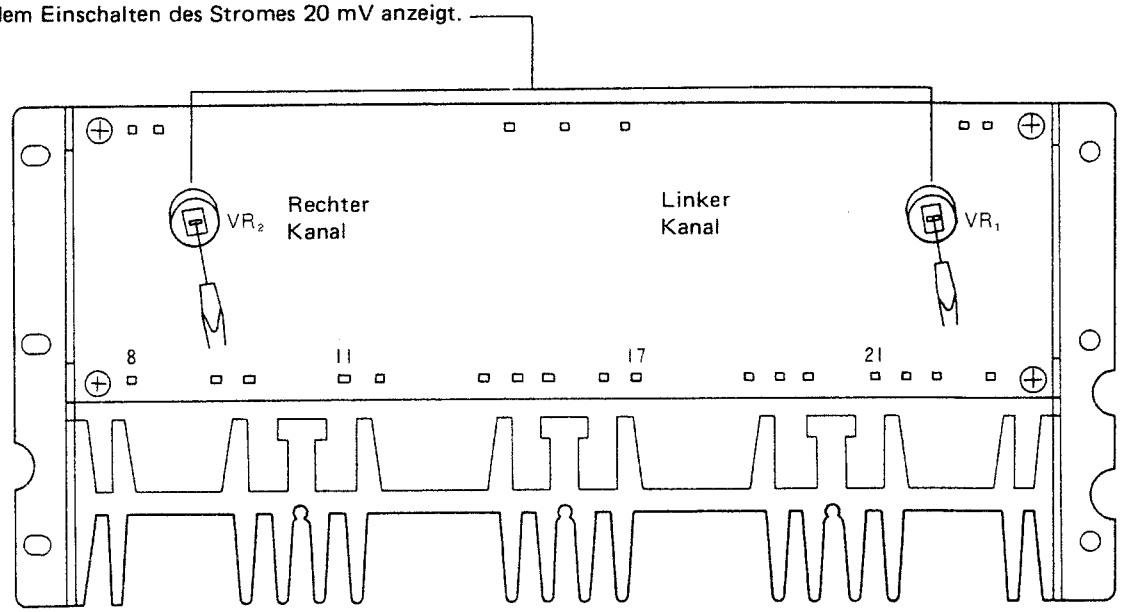
1. Regeleinstellungen am SX-636:
   FUNCTION (Programmquellen-Wählschalter): AM (MW)
   POWER (Stromschalter): ON (Ein)
2. Anschließen des Prüfsatzes:
   AM-Prüfsender (AM SG) . . . . . Ist reihengeschaltet mit der Ersatzantenne (1-kΩ-Widerstand) an die mit AM ANTENNA (MW-Antenne) bezeichneten Anschlüsse anzuschließen.
   Wechselspannungsmesser . . . . . Ist an die Anschlußbuchsen TAPE REC (Band/Aufnahme) anzuschließen.
3. Der AM-Prüfsender ist auf eine 30% Modulation bei 400 Hz und einen Ausgang von 30 [illegible] einzustellen.
4. Der AM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 600 kHz einzustellen und T6 ist zu drehen und auf einen maximalen Hörfrequenz-Ausgangspegel einzustellen. (Gleichzeitig ist der Kern der Ferritstabantenne einzustellen).
5. Der AM-Prüfsender und der SX-636 sind beide auf eine Anzeige von 1 400 kHz einzustellen und TC4 und TC5 sind zu drehen und auf einen maximalen Hörfrequenz-Ausgangspegel einzustellen.

* Die obigen Schritte 4 und 5 sind mehrmals nacheinander zu wiederholen, bis der maximale Ausgang erzielt wird, wenn diese Frequenzen angezeigt werden.

ABGLEICHEN DER ENDVERSTÄRUERSTUFE

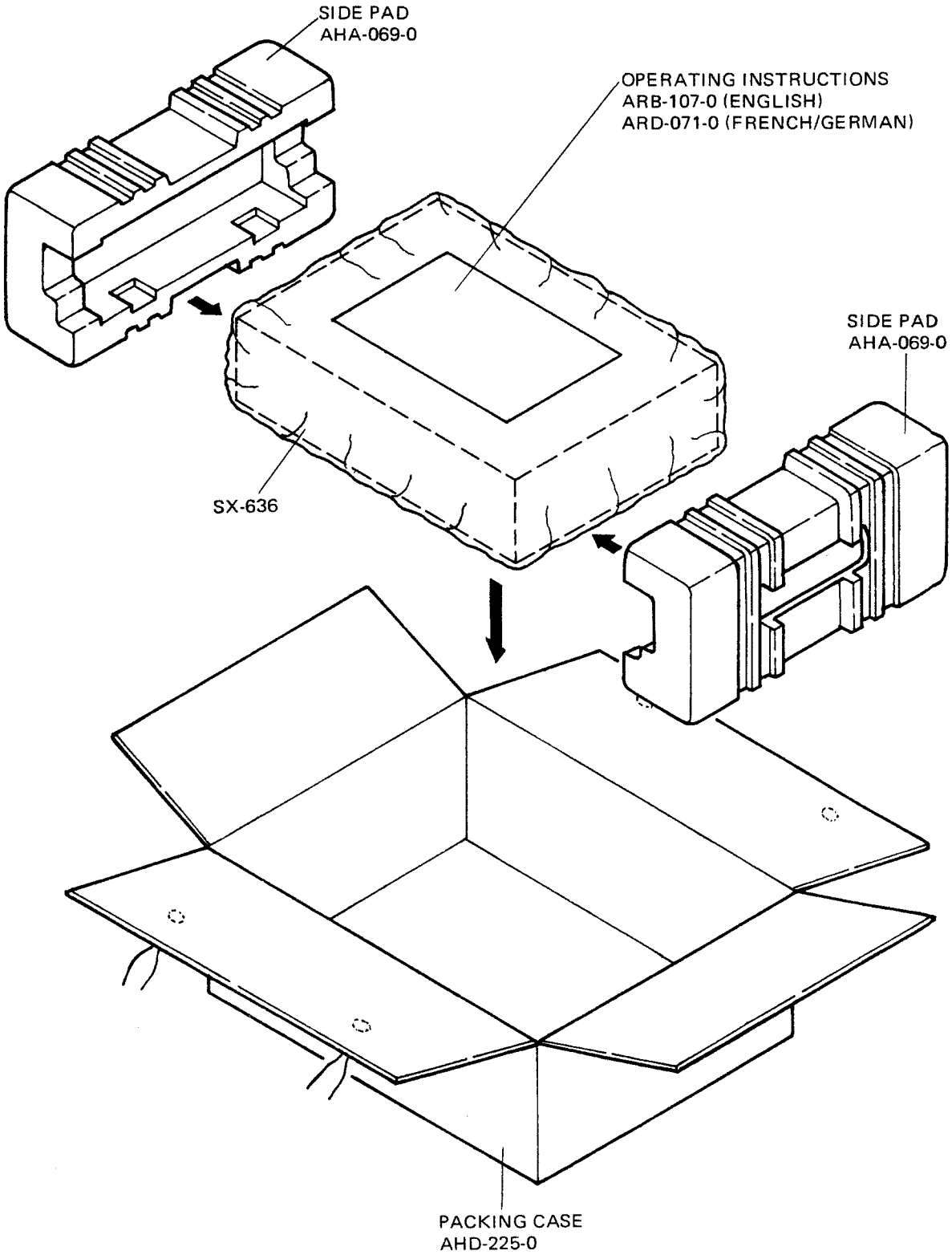
* Dieser Abgleich sollte durchgeführt werden, wenn einer der Transistoren in der Endverstärkerstufe ausgewechselt wurde.
* Die zuerst angegebenen Anschlüsse und VR-Nummern gelten für den linken Kanal und diejenigen in Klammern für den rechten Kanal.

1. Regeleinstellungen am SX-636:
   FUNCTION (Programmquellen-Wählschalter): AUX (Reserveeingang)
   POWER (Stromschalter): ON (Ein)
   SPEAKER (Lautsprecher): A (A-Taste niedergedrückt)
2. An die mit SPEAKER A (Lautsprecher A) bezeichneten Anschlüsse ist ein künstlicher Widerstand von 8Ω anzulegen. (An die Eingangsbuchsen (AUX) ist nichts anzuschließen).
3. Der Gleichspannungsmesser ist zwischen den Anschlüssen Nr. 21 (8) und Nr. 17 (11) anzuschließen.
4. VR1 (VR2) ist so zu justieren, daß der Gleichspannungsmesser 10 Minuten nach dem Einschalten des Stromes 20 mV anzeigt.



ENDVERSTÄRUERSTUFE-Schaltung (AWH-034)

9. PACKING METHOD AND PARTS NUMBERS



10. EXPLODED VIEW AND PARTS LIST

NOTE:
Parts number is subject to change for the purpose of improvement with notice of a service bulletin.
Service bulletin will be furnished whenever necessary and you are requested to amend parts number in this manual according to the instructions.

NOTICE: Any parts asterisked (*) are subject to being not supplied.

Parts List of Exploded View

Key No.	Description	Part No.	
1*	Lamp-held metal	ANF-262-A	
2	Pilot lamp socket	AKK-002-0	
3	Pilot lamp 8V, 0.3A (meter)	E22-032-0	
4*	Meter lamp box	ANH-219-B	
5	Meter (signal & tuning)	AAW-033-0	
6*	Wire clip	AEC-007-0	
7*	P.C. board cover	ANK-072-0	
8	Lamp board assembly	AWX-072-0	
9	Pilot lamp 8V, 0.3A (dial scale)	E22-032-0	
10*	Lamp box	ANH-217-0	
11	Pilot lamp 6V, 30mA (stereo indicator)	AEL-025-0	
12	Pilot lamp 8V, 50mA (program indicator)	AEL-022-0	
13*	Rubber bracket	AEB-060-0	
14	Dial pointer	AAF-020-0	
15*	Dial scale-head metal	ANG-105-0	
16	Dial scale	AAG-081-B	
17*	Pulley shaft	M49-025-E	
18*	Pulley	AEC-153-0	
19*	Sub-panel	AND-076-B	
20	Washer 1t	M45-086-A	
21	Nut 9ϕ	B71-004-0	
22	Push switch (power)	ASG-043-0	KCU
	Push switch (power)	ASG-070-0	FV, GN
23	Front panel assembly	ANB-277-B	
24	Spacer	AEC-164-0	
25	Spacer	AEC-116-0	
26	Knob (power)	AAD-084-A	
27	Coupler (knob-to-switch)	AAE-008-0	
28	Knob (speakers, filter, mode, loudness, tape monitor)	AAD-054-B	
29	Coupler (knob-to-switch)	AAE-007-0	
30	Knob (bass, treble, balance, volume, function)	AAB-068-A	
31	Knob (tuning)	AAA-024-0	
32	Knob (FM muting)	AAD-082-B	
33	Phone jack (headphone)	K72-026-0	
34*	Wire clip	AEC-004-0	
35*	Pulley (small)	AEC-101-0	

NOTICE: Any parts asterisked (*) are subject to being not supplied.

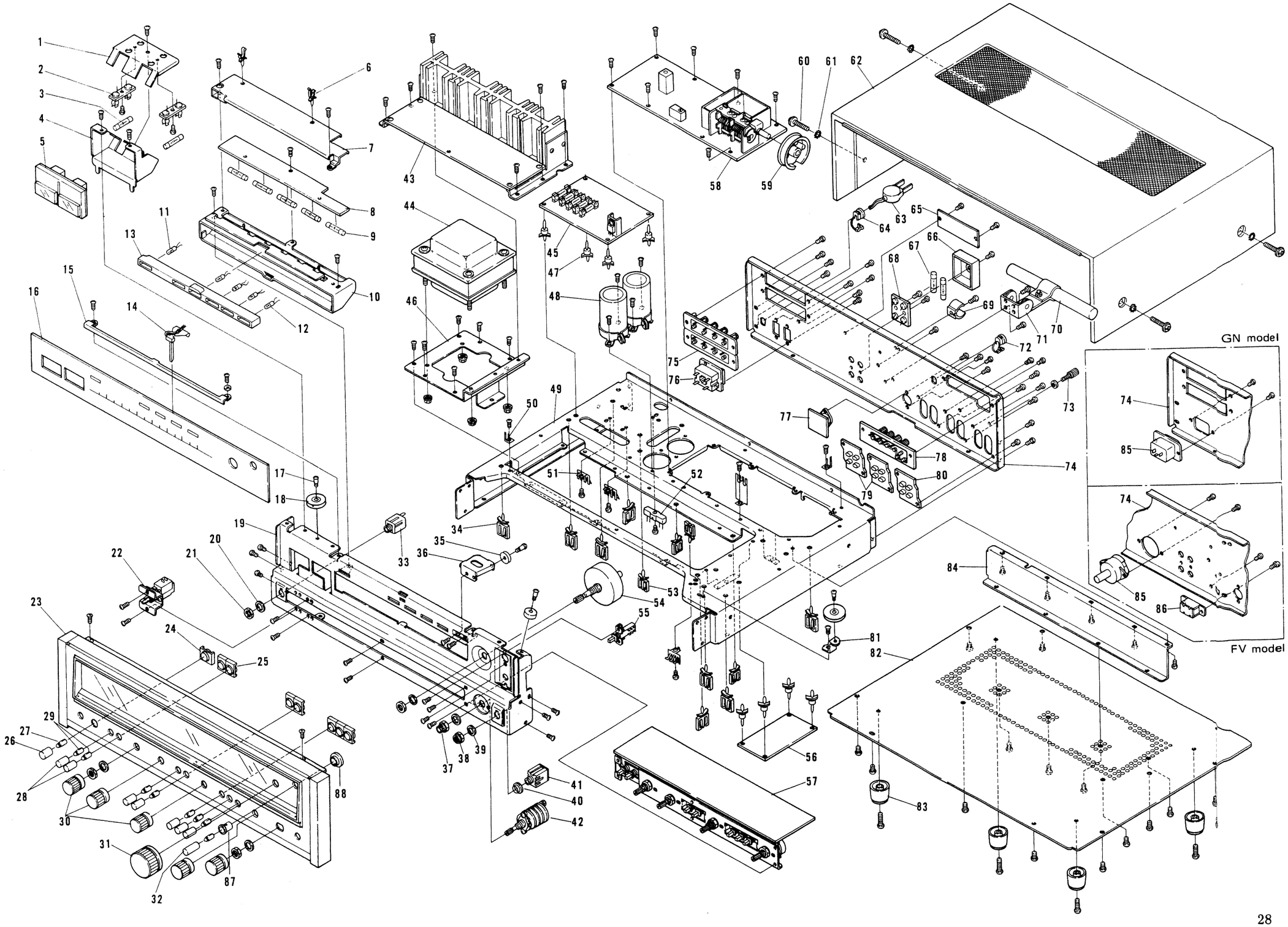
Key No.	Description	Part No.	
36*	Pulley-held metal	ANG-107-A	
37	Special nut	ALA-008-0	
38	Nut (insulator)	AEC-085-0	
39	Washer (insulator)	E34-004-0	
40	Special washer (insulator)	E32-045-A	
41	Phone jack (microphone)	K72-020-0	
42	Rotary switch (function)	ASC-060-0	
43	Power amplifier assembly	AWH-034-0	
44	Power transformer	ATT-176-0	KCU
	Power transformer	ATT-184-0	FV
	Power transformer	ATT-185-0	GN
45	Power supply circuit assembly	AWR-060-0	KCU, FV
	Power supply circuit assembly	AWR-061-0	GN
46*	Power transformer-held metal	ANF-263-0	
47*	P.C. board holder	AEB-019-0	
48	Electrolytic capacitor 6,800μF, 35V	ACH-041-0	
49*	Chassis	ANA-070-C	
50	Ground terminal strip (2P)	K13-048-0	
51	Ground terminal strip (4P)	K13-047-0	
52	Terminal strip (2P)	AKC-023-A	KCU, GN
53*	Wire clip	AEC-005-0	
54	Tuning shaft assembly	AXA-025-0	
55	Push switch (FM muting)	ASG-040-0	
56	AF amplifier assembly	AWK-035-0	
57	Equalizer amplifier assembly	AWF-014-0	
58	Tuner assembly	AWE-046-0	
59	Tuning pulley	AXA-015-A	
60	Screw M4x15	ABA-010-A	
61	Washer	B21-011-0	
62	Wooden cabinet	AMM-041-A	
63	AC power cord	ADG-005-A	KCU
	AC power cord	ADG-004-0	FV
64	AC cord grommet	AEC-079-0	KCU, FV
65*	Model name plate	AAL-208-0	KCU
	Model name plate	AAL-210-0	FV
	Model name plate	AAL-209-A	GN
66	Plastic cover	AEC-058-0	
67	Fuse 4A (protection)	AEK-100-0	KCU, FV
	Fuse 3.15A (protection)	AEK-042-0	GN
68	Fuse holder (protection)	AKR-011-0	KCU, FV
	Fuse holder (protection)	AKR-017-0	GN
69	Antenna clamper	AEC-154-A	
70	Ferrite loopstick antenna	ATB-026-0	
71	Ferrite antenna holder assembly	AXB-001-A	
72	AC cord grommet	AEC-079-0	
73	Binding post for ground	AKE-017-0	
74*	Rear panel	ANC-122-A	KCU
	Rear panel	ANC-123-A	FV
	Rear panel	ANC-124-A	GN
75	Speaker output terminal	AKA-001-0	

Continued on the Next Page

NOTICE: Any parts asterisked (*) are subject to being not supplied.

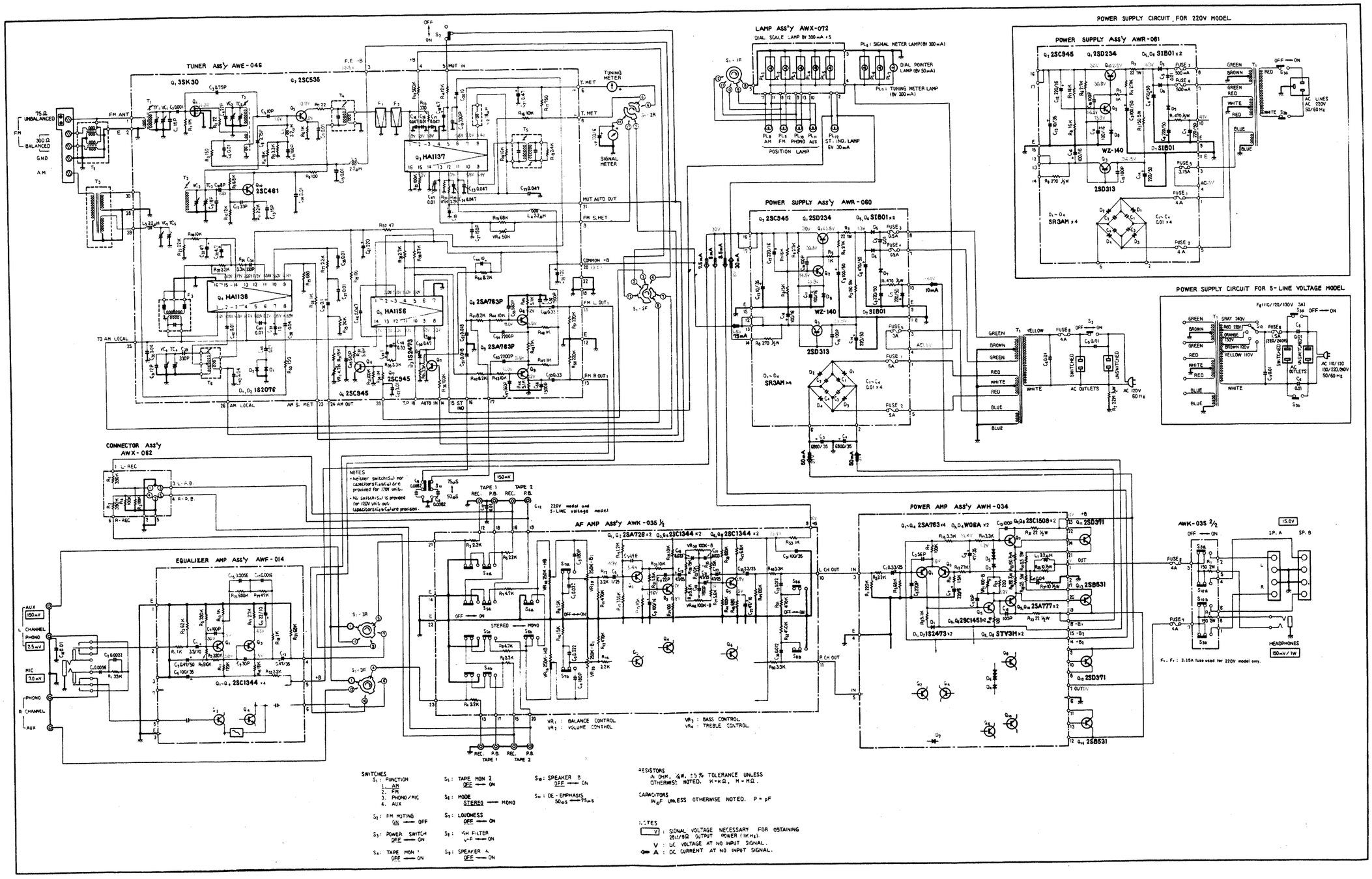
Key No.	Description	Part No.	
76	AC socket	AKP-004-0	KCU, FV
77	5P connector assembly	AWX-062-0	
78	Antenna terminal board	AKA-002-0	
79	Phono jack-A (4 jacks)	AKB-014-0	
80	Phono jack-B (4 jacks)	AKB-015-0	
81*	Pulley-held metal	ANG-106-A	
82*	Bottom plate	ANE-059-A	
83	Foot assembly	AEC-061-A	
84*	Reinforced metal	ANF-267-A	
85	Fuse holder (AC power)	AKR-001-0	FV
	Connector (AC power)	AKP-008-0	GN
86	Slide switch (de-emphasis)	ASH-008-0	FV
87	Knob spacer	AEC-152-0	
88	Bush	AEC-160-0	

Exploded View



11. SCHEMATIC DIAGRAMS, P.C. BOARD PATTERNS AND PARTS LIST

11.1 CIRCUIT CONNECTION DIAGRAM AND MISCELLANEOUS PARTS



Miscellaneous Parts

- CAPACITORS: IN μF UNLESS OTHERWISE NOTED p: pF
- RESISTORS: IN Ω, ¼W UNLESS OTHERWISE NOTED k: kΩ, M: MΩ

CAPACITORS

Symbol	Description			Part No.	
C1	Mylar	0.0056	50V	CQMA 562K 50	
C2	Mylar	0.0022	50V	CQMA 222K 50	
C3	Electrolytic	6,800	35V	ACH-041-0	
C4	Electrolytic	6,800	35V	ACH-041-0	
C5	Ceramic	0.01	250V	ACG-001-0	KCU, FV
C6	Ceramic	0.01	250V	ACG-003-0	KCU
	Ceramic	0.01	250V	ACG-001-0	FV
C7	Ceramic	0.01	250V	ACG-001-0	FV
C8	Electrolytic	100	6V	CEA 101P 6	
C9	Mylar	0.0082	50V	CQMA 822J 50	KCU, FV
C10	Mylar	0.0082	50V	CQMA 822J 50	KCU, FV
C11	Ceramic	0.01	50V	CKDYF 103Z 50	
C12	Ceramic	0.01	50V	CKDYF 103Z 50	GN, FV

RESISTORS

Symbol	Description			Part No.	
R1	Carbon film	39k		RD¼PS 393J	
R2	Carbon film	2.2M	½W	RD½PS 225J	

SWITCHES

Symbol	Description	Part No.	
S1	Rotary switch (function)	ASC-060-0	
S2	Push switch (FM muting)	ASG-040-0	
S3	Push switch (power)	ASG-043-0	KCU
	Push switch (power)	ASG-070-0	GN, FV
S11	Slide switch (de-emphasis)	ASH-008-0	FV

TRANSFORMERS

Symbol	Description	Part No.	
T1	Power transformer	ATT-176-0	KCU
	Power transformer	ATT-184-0	FV
	Power transformer	ATT-185-0	GN
T2	Balun	T22-025-A	
T3	Ferrite loopstick antenna	ATB-026-0	

OTHERS

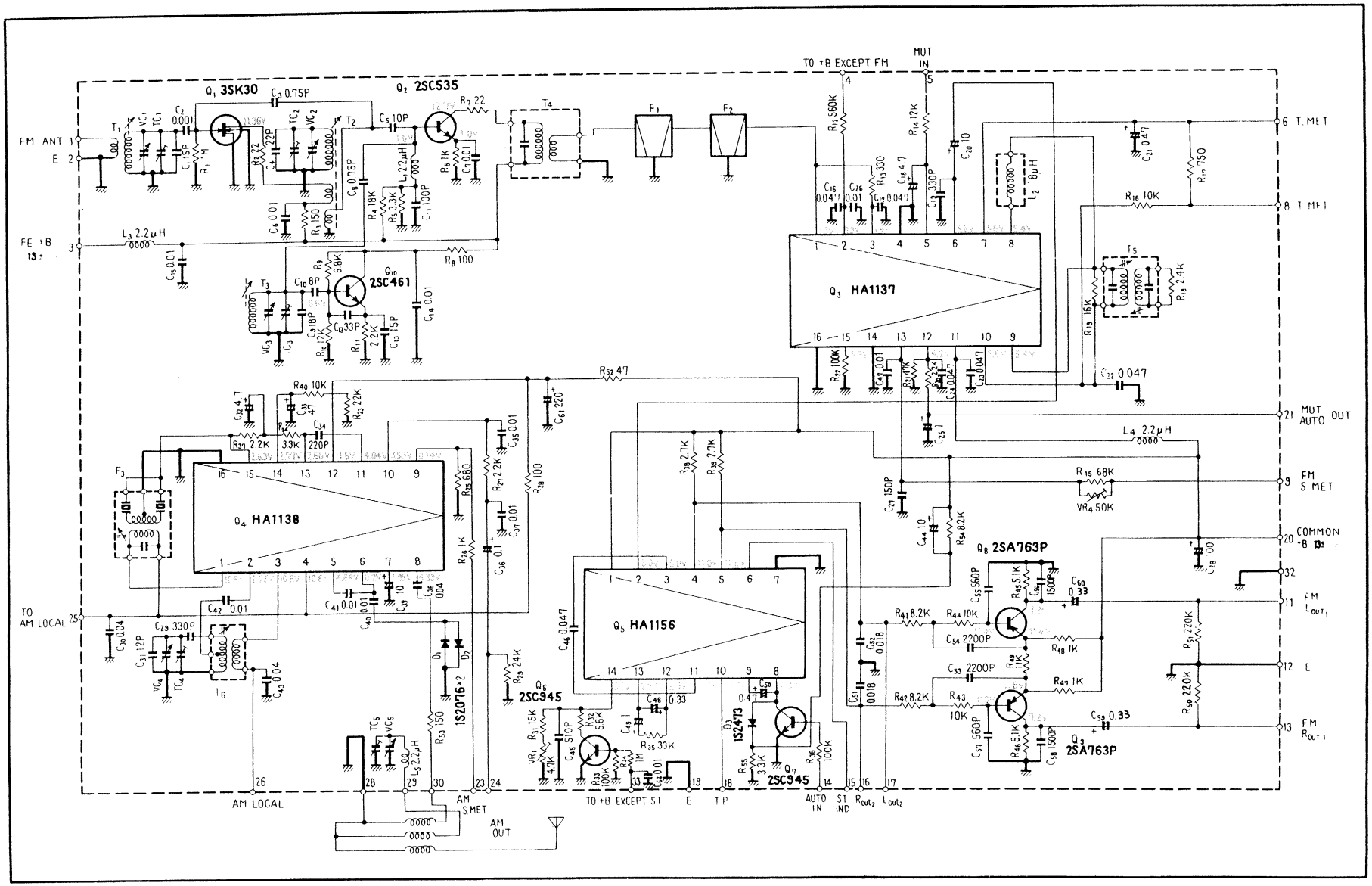
Symbol	Description	Part No.	
	Tuner assembly	AWE-046-0	
	Equalizer amplifier assembly	AWF-014-0	
	AF amplifier assembly	AWK-035-0	
	Power amplifier assembly	AWH-034-0	
	Power supply circuit assembly	AWR-060-0	KCU, FV
	Power supply circuit assembly	AWR-061-0	GN

Continued on the Next Page

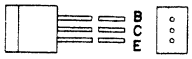
Symbol	Description	Part No.	
	5P connector assembly	AWX-062-0	
	Lamp board assembly	AWX-072-0	
	Front panel assembly	ANB-277-B	
	Foot assembly	AEC-061-A	
	Wooden cabinet	AMM-041-A	
	Tuning shaft assembly	AXA-025-0	
	Tuning pulley	AXA-015-A	
	Knob (tuning)	AAA-024-0	
	Knob (bass, treble, balance, volume, function)	AAB-068-A	
	Knob (speakers, filter, mode, loudness, tape monitor)	AAD-054-B	
	Knob (FM muting)	AAD-082-B	
	Knob (power)	AAD-084-A	
	Dial scale	AAG-081-B	
	Meter (signal & tuning)	AAW-033-0	
	Coupler (knob-to-switch)	AAE-007-0	
	Coupler (knob-to-switch)	AAE-008-0	
	Antenna terminal board	AKA-002-0	
	Phono jack-A (4 jacks)	AKB-014-0	
	Phono jack-B (4 jacks)	AKB-015-0	
	Speaker output terminal	AKA-001-0	
F1	Fuse 5A (protection)	AEK-108-0	KCU, FV
	Fuse 4A (protection)	AEK-400-0	GN
F2	Fuse 5A (protection)	AEK-108-0	KCU, FV
	Fuse 4A (protection)	AEK-400-0	GN
F3	Fuse 0.5A (protection)	AEK-107-0	KCU, FV
	Fuse 500mA (protection)	AEK-014-0	GN
F4	Fuse 0.5A (protection)	AEK-107-0	KCU, FV
	Fuse 500mA (protection)	AEK-014-0	GN
F5	Fuse 3A (protection)	AEK-101-0	KCU, FV
	Fuse 3.15A (protection)	AEK-042-0	GN
F6	Fuse 4A (protection)	AEK-100-0	KCU, FV
	Fuse 3.15A (protection)	AEK-042-0	GN
F7	Fuse 4A (protection)	AEK-100-0	KCU, FV
	Fuse 3.15A (protection)	AEK-042-0	GN
F8	Fuse 4A (protection)	AEK-202-0	KCU
	Fuse 1.5A (AC power)	AEK-108-0	FV
	Pilot lamp 6V, 30mA (stereo indicator)	AEL-025-0	
	Pilot lamp 8V, 50mA (program indicator)	AEL-022-0	
	Phone jack (microphone)	K72-020-0	
	Phone jack (headphone)	K72-026-0	
	Pilot lamp socket	AKK-002-0	
	AC socket	AKP-004-0	KCU, FV
	Fuse holder (AC power)	AKR-001-0	FV
	Connector (AC power)	AKP-008-0	GN
	Fuse holder (protection)	AKR-011-0	KCU, FV
	Fuse holder (protection)	AKR-017-0	GN

Symbol	Description	Part No.	
	Ferrite antenna holder assembly	AXB-001-A	
	Plastic cover	AEC-058-0	
	Screw M4x15	ABA-010-A	
	Washer	B21-011-0	
	Binding post for ground	AKE-017-0	
	AC power cord	ADG-005-A	KCU
	AC power cord	ADG-004-0	FV
	FM T-type antenna	ADH-002-0	
	Operating instructions (English)	ARB-107-0	
	Operating instructions (French/German)	ARD-071-0	GN, FV
	Packing case	AHD-225-0	
	Side pad	AHA-069-0	

11.2 TUNER ASSEMBLY (AWE-046-0)



2SC535



2SC461
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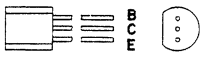
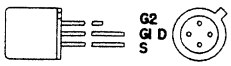
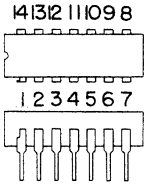
2SA763P



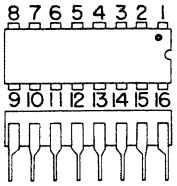
3SK30



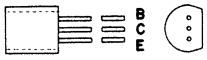
HA1156



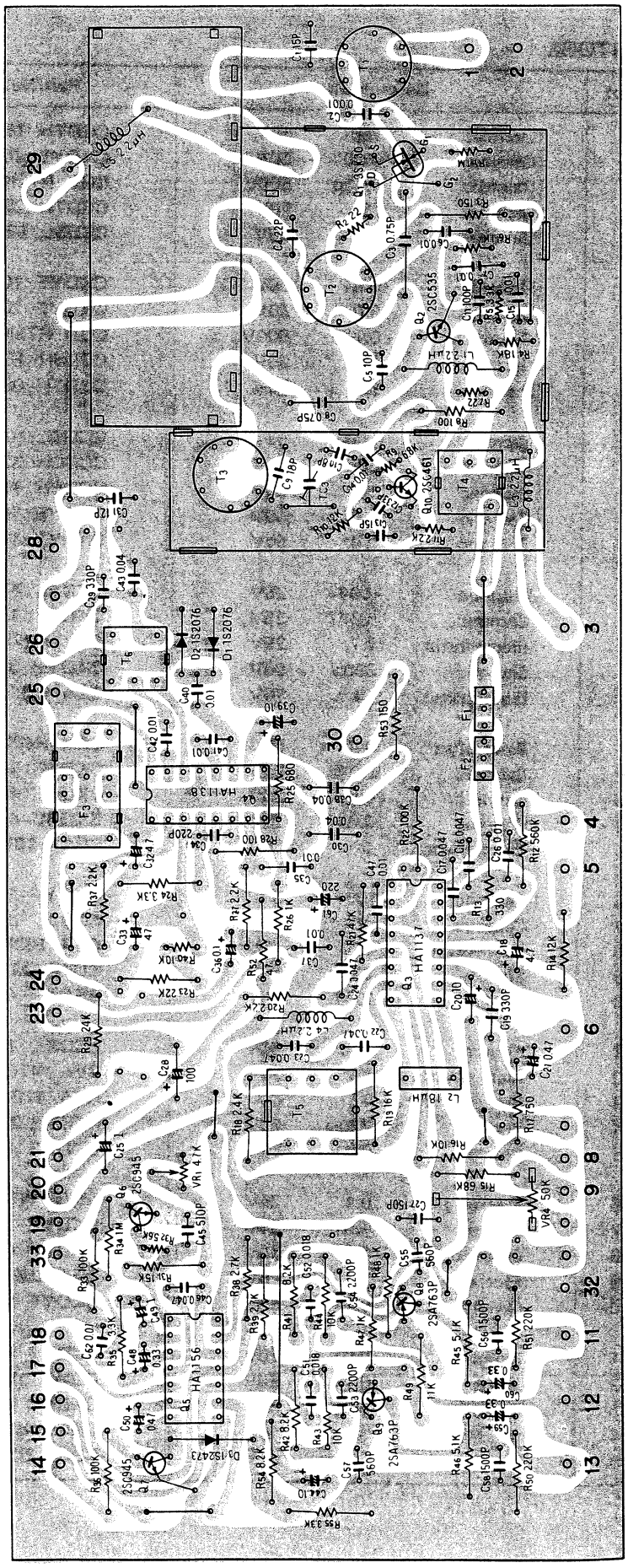
HA1137
HA1138



2SA725



Foil Side (AWE-046-0)



Parts List of Tuner Assembly (AWE-046-0)

CAPACITORS

Symbol	Description			Part No.	
C1	Ceramic	15p	50V	CCDTH 150K 50	
C2	Ceramic	0.001	50V	CKDYB 102K 50	
C3	Ceramic	0.75p	500V	CGB R75K 500	
C4	Ceramic	22p	50V	CCDTH 220K 50	
C5	Ceramic	10p	50V	CCDSL 100F 50	
C6	Ceramic	0.01	50V	CKDYF 103Z 50	
C7	Ceramic	0.01	50V	CKDYF 103Z 50	
C8	Ceramic	0.75p	500V	CGB R75K 500	
C9	Ceramic	18p	50V	CCDSH 180K 50	
C10	Ceramic	8p	50V	CCDTH 080F 50	
C11	Ceramic	100p	50V	CCDSL 101K 50	
C12	Ceramic	33p	50V	CCDCH 330K 50	
C13	Ceramic	15p	50V	CCDCH 150K 50	
C14	Ceramic	0.01	50V	CKDYB 103K 50	
C15	Ceramic	0.01	50V	CKDYF 103Z 50	
C16	Ceramic	0.047	25V	CKDBC 473Z 25	
C17	Ceramic	0.047	25V	CKDBC 473Z 25	
C18	Electrolytic	4.7	25V	CEA 4R7P 25	
C19	Ceramic	330p	50V	CKDYB 331K 50	
C20	Electrolytic	10	16V	CEA 100P 16	
C21	Electrolytic	0.47	50V	CEA R47P 50	
C22	Ceramic	0.047	25V	CKDBC 473Z 25	
C23	Ceramic	0.047	25V	CKDBC 473Z 25	
C24	Ceramic	0.047	25V	CKDBC 473Z 25	
C25	Electrolytic	1	50V	CEA 010P 50	
C26	Ceramic	0.01	50V	CKDYF 103Z 50	
C27	Ceramic	150p	50V	CCDSL 151K 50	
C28	Electrolytic	100	16V	CEA 101P 16	
C29	Styrol	330P	50V	CQSA 331J 50	
C30	Ceramic	0.04	50V	CKDYF 403Z 50	
C31	Ceramic	12p	50V	CCDXL 120K 50	
C32	Electrolytic	4.7	25V	CEA 4R7P 25	
C33	Electrolytic	47	6V	CEA 470P 6	
C34	Ceramic	220p	50V	CCDSL 221K 50	
C35	Ceramic	0.01	50V	CKDYB 103K 50	
C36	Electrolytic	0.1	25V	CSSA 0R1M 25	
C37	Ceramic	0.01	50V	CKDYB 103K 50	
C38	Ceramic	0.04	50V	CKDYF 403Z 50	
C39	Electrolytic	10	16V	CEA 100P 16	
C40	Ceramic	0.01	50V	CKDYF 103Z 50	
C41	Ceramic	0.01	50V	CKDYF 103Z 50	
C42	Mylar	0.01	50V	CQMA 103K 50	
C43	Ceramic	0.04	50V	CKDYF 403Z 50	
C44	Electrolytic	10	16V	CEA 100P 16	
C45	Styrol	510p	50V	CQSH 511J 50	

Symbol	Description			Part No.	
C46	Mylar	0.047	50V	CQMA 473J 50	
C47	Ceramic	0.01	50V	CKDYF 103Z 50	
C48	Electrolytic	0.33	10V	CSSA R33M 10	
C49	Electrolytic	1	10V	CSSA 010M 10	
C50	Electrolytic	0.47	10V	CSSA R47M 10	
C51	Mylar	0.018	50V	CQMA 183J 50	
C52	Mylar	0.018	50V	CQMA 183J 50	
C53	Ceramic	0.0022	50V	CKDYB 222K 50	
C54	Ceramic	0.0022	50V	CKDYB 222K 50	
C55	Ceramic	560p	50V	CKDYB 561K 50	
C56	Ceramic	0.0015	50V	CKDYB 152K 50	
C57	Ceramic	560p	50V	CKDYB 561K 50	
C58	Ceramic	0.0015	50V	CKDYB 152K 50	
C59	Electrolytic	0.33	25V	CSSA R33M 25	
C60	Electrolytic	0.33	25V	CSSA R33M 25	
C61	Electrolytic	220	16V	CEA 221P 16	
C62	Ceramic	0.01	50V	CKDYF 103Z 50	
VC	Tuning capacitor			ACK-012-0	
TC3	Ceramic trimmer			C43-007-A	

RESISTORS AND POTENTIOMETERS

Symbol	Description		Part No.	
R1	Carbon film	1M	RD¼VS 105J	
R2	Carbon film	22	RD¼VS 220J	
R3	Carbon film	150	RD¼VS 151J	
R4	Carbon film	18k	RD¼VS 183J	
R5	Carbon film	3.3k	RD¼VS 332J	
R6	Carbon film	1k	RD¼VS 102J	
R7	Carbon film	22	RD¼VS 220J	
R8	Carbon film	100	RD¼VS 101J	
R9	Carbon film	6.8k	RD¼VS 682J	
R10	Carbon film	12k	RD¼VS 123J	
R11	Carbon film	2.2k	RD¼VS 222J	
R12	Carbon film	560k	RD¼PS 564J	
R13	Carbon film	330	RD¼PS 331J	
R14	Carbon film	12k	RD¼PS 123J	
R15	Carbon film	68k	RD¼PS 683J	
R16	Carbon film	10k	RD¼PS 103J	
R17	Carbon film	750	RD¼PS 751J	
R18	Carbon film	2.4k	RD¼PS 242J	
R19	Carbon film	16k	RD¼PS 163J	
R20	Carbon film	2.2k	RD¼PS 222J	
R21	Carbon film	47k	RD¼PS 473J	
R22	Carbon film	100k	RD¼PS 104J	
R23	Carbon film	22k	RD¼PS 223J	
R24	Carbon film	3.3k	RD¼PS 332J	
R25	Carbon film	680	RD¼PS 681J	

Continued on the Next Page

Symbol	Description		Part No.	
R26	Carbon film	1k	RD¼PS 102J	
R27	Carbon film	2.2k	RD¼PS 222J	
R28	Carbon film	100	RD¼PS 101J	
R29	Carbon film	24k	RD¼PS 243J	
R30				
R31	Carbon film	15k	RD¼PS 153J	
R32	Carbon film	5.6k	RD¼VS 562J	
R33	Carbon film	100k	RD¼PS 104J	
R34	Carbon film	1M	RD¼PS 105J	
R35	Carbon film	3.3k	RD¼PS 332J	
R36	Carbon film	100k	RD¼PS 104J	
R37	Carbon film	2.2k	RD¼PS 222J	
R38	Carbon film	2.7k	RD¼PS 272J	
R39	Carbon film	2.7k	RD¼PS 272J	
R40	Carbon film	10k	RD¼PS 103J	
R41	Carbon film	8.2k	RD¼PS 822J	
R42	Carbon film	8.2k	RD¼PS 822J	
R43	Carbon film	10k	RD¼PS 103J	
R44	Carbon film	10k	RD¼PS 103J	
R45	Carbon film	5.1k	RD¼PS 512J	
R46	Carbon film	5.1k	RD¼PS 512J	
R47	Carbon film	1k	RD¼PS 102J	
R48	Carbon film	1k	RD¼PS 102J	
R49	Carbon film	11k	RD¼PS 113J	
R50	Carbon film	220k	RD¼PS 224J	
R51	Carbon film	220k	RD¼PS 224J	
R52	Carbon film	47	RD¼PS 470J	
R53	Carbon film	150	RD¼PS 151J	
R54	Carbon film	8.2k	RD¼PS 822J	
R55	Carbon film	3.3k	RD¼PS 332J	
VR1	Variable resistor, semi-fixed 4.7k-B		C92-051-0	
VR4	Variable resistor, semi-fixed 50k-B		ACP-043-0	

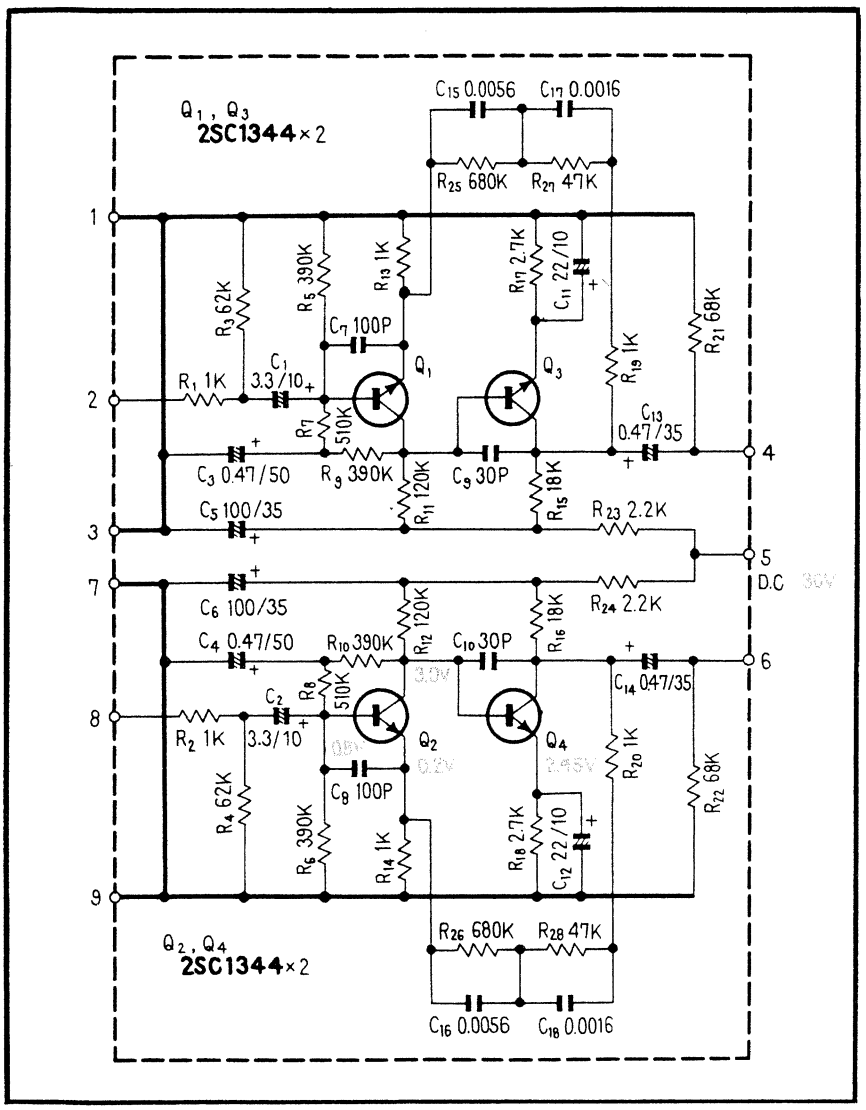
SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	FET	3SK30-B		
Q2	Transistor	2SC535-A or B		
Q3	IC	HA1137		
Q4	IC	HA1138		
Q5	IC	HA1156		
Q6	Transistor	2SC945-Q or R		
Q7	Transistor	2SC945-Q or R		
Q8	Transistor	2SA763P-5 or 6 (2SA725-F or G)		
Q9	Transistor	2SA763P-5 or 6 (2SA725-F or G)		
Q10	Transistor	2SC461-B		
D1	Diode	1S2076		
D2	Diode	1S2076		
D3	Diode	1S2473		

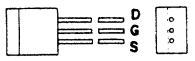
TRANSFORMERS, COILS AND FILTERS

Symbol	Description	Part No.	
T1	FM antenna coil	ATC-023-0	
T2	FM RF coil	ATC-024-0	
T3	FM OSC coil	ATC-025-0	
T4	FM matching transformer	ATE-008-0	
T5	FM IF transformer	T73-035-A	
T6	AM OSC coil	ATB-013-0	
F1	FM ceramic filter	ATF-013-B	
F2	FM ceramic filter	ATF-013-B	
F3	AM ceramic filter	ATF-009-0	
L1	RF choke coil	T24-028-A	
L2	Choke coil	ATH-007-0	
L3	RF choke coil	T24-028-A	
L4	RF choke coil	T24-028-A	
L5	RF choke coil	T24-028-A	

11.3 EQUALIZER AMPLIFIER ASSEMBLY (AWF-014-0)



2SC1344



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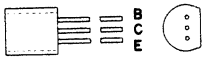
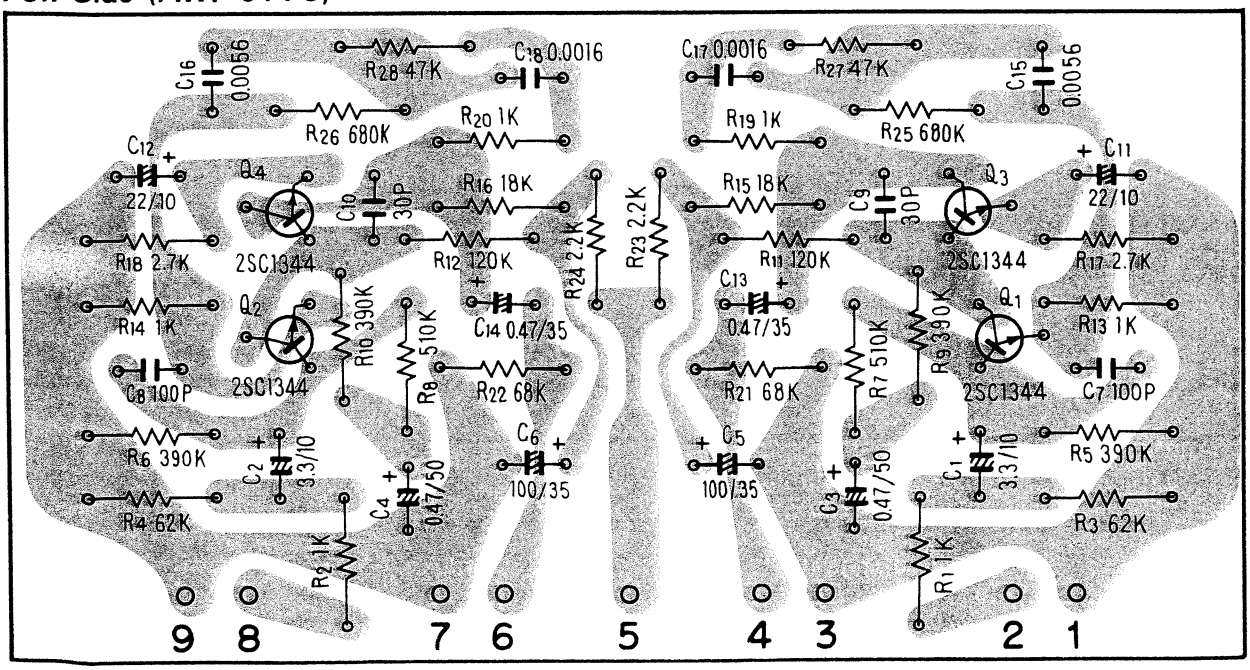


Foil Side (AWF-014-0)



Parts List of Equalizer Amplifier Assembly (AWF-014-0)

CAPACITORS

Symbol	Description			Part No.	
C1	Electrolytic	3.3	10V	CSZA 3R3M 10	
C2	Electrolytic	3.3	10V	CSZA 3R3M 10	
C3	Electrolytic	0.47	50V	CEA R47P 50	
C4	Electrolytic	0.47	50V	CEA R47P 50	
C5	Electrolytic	100	35V	CEA 101P 35	
C6	Electrolytic	100	35V	CEA 101P 35	
C7	Ceramic	100p	50V	CCDSL 101K 50	
C8	Ceramic	100p	50V	CCDSL 101K 50	
C9	Ceramic	30p	50V	CCDSL 300K 50	
C10	Ceramic	30p	50V	CCDSL 300K 50	
C11	Electrolytic	22	10V	CEA 220P 10	
C12	Electrolytic	22	10V	CEA 220P 10	
C13	Electrolytic	0.47	35V	CSZA R47M 35	
C14	Electrolytic	0.47	35V	CSZA R47M 35	
C15	Styrol	0.0056	50V	CQSA 562J 50	
C16	Styrol	0.0056	50V	CQSA 562J 50	
C17	Styrol	0.0016	50V	CQSA 162J 50	
C18	Styrol	0.0016	50V	CQSA 162J 50	

RESISTORS

Symbol	Description		Part No.	
R1	Carbon film	1k	RD¼PM 102J	
R2	Carbon film	1k	RD¼PM 102J	
R3	Carbon film	62k	RD¼PM 623J	
R4	Carbon film	62k	RD¼PM 623J	
R5	Carbon film	390k	RD¼PM 394J	
R6	Carbon film	390k	RD¼PM 394J	
R7	Carbon film	510k	RD¼PM 514J	
R8	Carbon film	510k	RD¼PM 514J	
R9	Carbon film	390k	RD¼PM 394J	
R10	Carbon film	390k	RD¼PM 394J	
R11	Carbon film	120k	RD¼PM 124J	
R12	Carbon film	120k	RD¼PM 124J	
R13	Carbon film	1k	RD¼PM 102J	
R14	Carbon film	1k	RD¼PM 102J	
R15	Carbon film	18k	RD¼PM 183J	
R16	Carbon film	18k	RD¼PM 183J	
R17	Carbon film	2.7k	RD¼PM 272J	
R18	Carbon film	2.7k	RD¼PM 272J	
R19	Carbon film	1k	RD¼PM 102J	
R20	Carbon film	1k	RD¼PM 102J	
R21	Carbon film	68k	RD¼PM 683J	
R22	Carbon film	68k	RD¼PM 683J	
R23	Carbon film	2.2k	RD¼PM 222J	
R24	Carbon film	2.2k	RD¼PM 222J	
R25	Carbon film	680k	RD¼PM 684J	

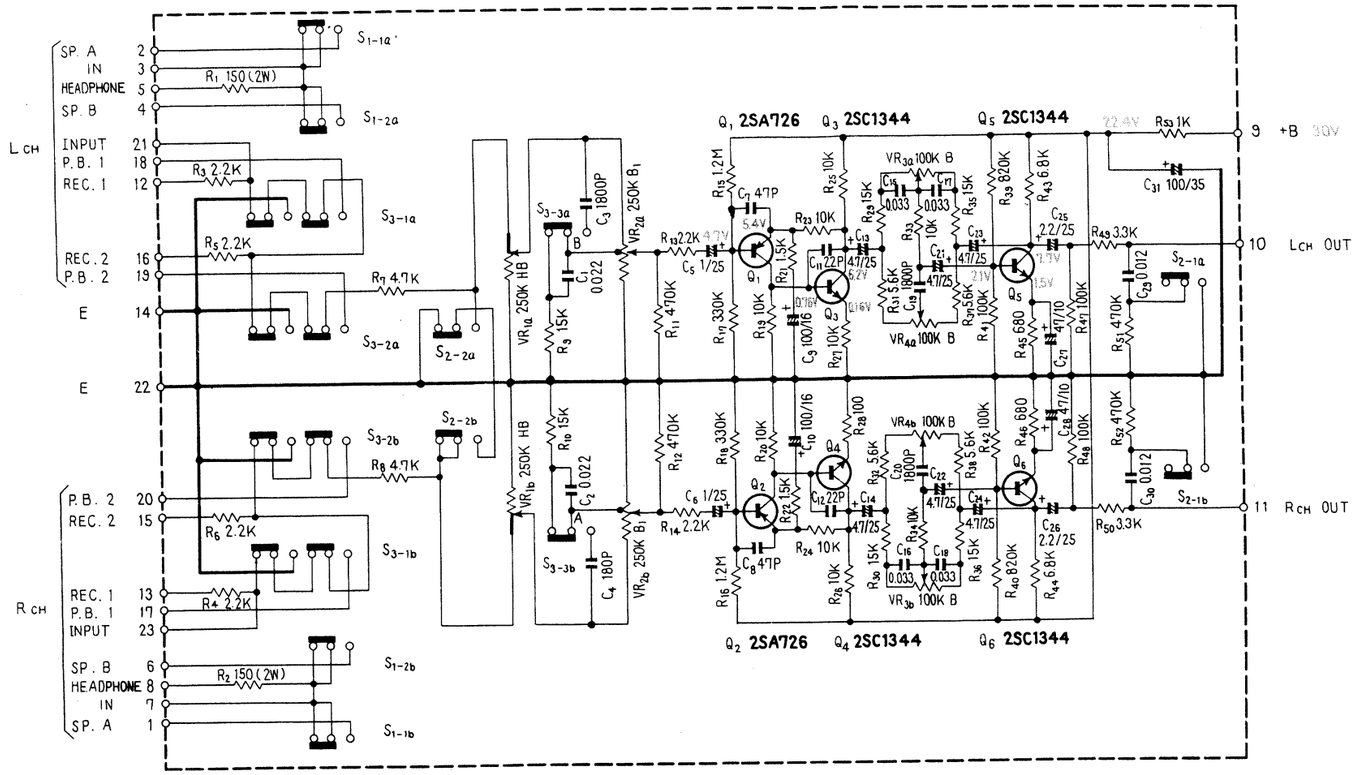
Continued on the Next Page

Symbol	Description		Part No.	
R26	Carbon film	680k	RD¼PM 684J	
R27	Carbon film	47k	RD¼PM 473J	
R28	Carbon film	47k	RD¼PM 473J	

SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	Transistor	2SC1344-E or 0 (2SC1312-G or F)		
Q2	Transistor	2SC1344-E or 0 (2SC1312-G or F)		
Q3	Transistor	2SC1344-E or 0 (2SC1312-G or F)		
Q4	Transistor	2SC1344-E or 0 (2SC1312-G or F)		

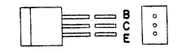
11.4 AF AMPLIFIER ASSEMBLY (AWK-035-0)



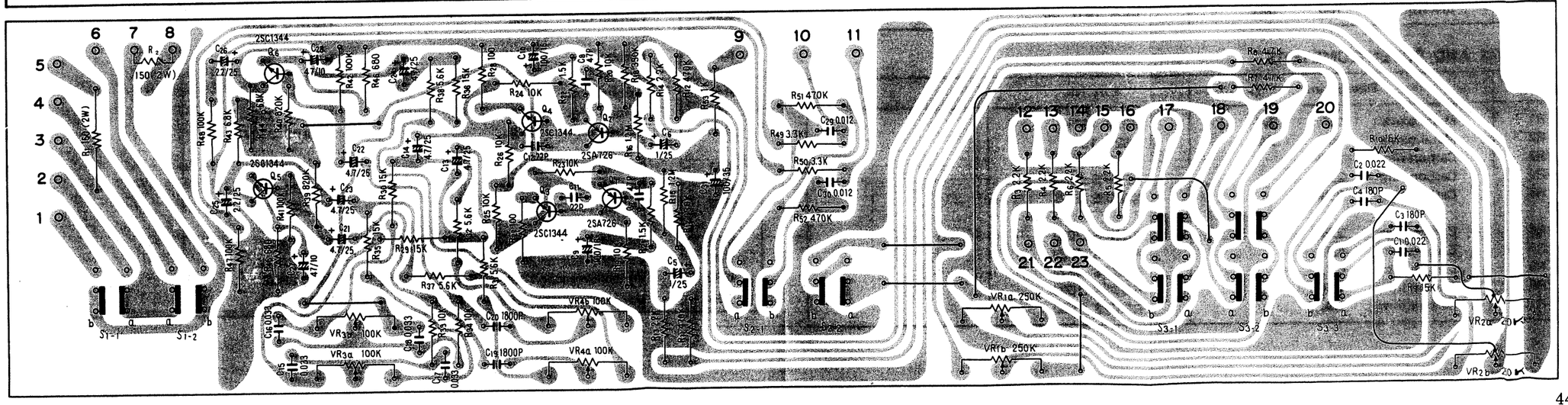
S_{1-1}	SPEAKER – A	OFF ↔ ON		VR_1	BALANCE
S_{1-2}	SPEAKER – B	OFF ↔ ON		VR_2	VOLUME
S_{2-1}	HIGH FILTER	OFF ↔ ON		VR_3	BASS
S_{2-2}	MODE	STEREO ↔ MONO		VR_4	TREBLE
S_{3-1}	TAPE MON. 1	OFF ↔ ON			
S_{3-2}	TAPE MON. 2	OFF ↔ ON			
S_{3-3}	LOUDNESS	OFF ↔ ON			

2SA726
2SC1312

2SC1344



Foil Side (AWK-035-0)



Parts List of AF Amplifier Assembly (AWK-035-0)

CAPACITORS

Symbol	Description			Part No.	
C1	Mylar	0.022	50V	CQMA 223K 50	
C2	Mylar	0.022	50V	CQMA 223K 50	
C3	Ceramic	180p	50V	CCDSL 181K 50	
C4	Ceramic	180p	50V	CCDSL 181K 50	
C5	Electrolytic	1	25V	CSZA 010M 25	
C6	Electrolytic	1	25V	CSZA 010M 25	
C7	Ceramic	47p	50V	CCDSL 470K 50	
C8	Ceramic	47p	50V	CCDSL 470K 50	
C9	Electrolytic	100	16V	CEA 101P 16	
C10	Electrolytic	100	16V	CEA 101P 16	
C11	Ceramic	22p	50V	CCDSL 220K 50	
C12	Ceramic	22p	50V	CCDSL 220K 50	
C13	Electrolytic	4.7	25V	CEA 4R7P 25	
C14	Electrolytic	4.7	25V	CEA 4R7P 25	
C15	Mylar	0.033	50V	CQMA 333K 50	
C16	Mylar	0.033	50V	CQMA 333K 50	
C17	Mylar	0.033	50V	CQMA 333K 50	
C18	Mylar	0.033	50V	CQMA 333K 50	
C19	Mylar	0.0018	50V	CQMA 182K 50	
C20	Mylar	0.0018	50V	CQMA 182K 50	
C21	Electrolytic	4.7	25V	CEA 4R7P 25	
C22	Electrolytic	4.7	25V	CEA 4R7P 25	
C23	Electrolytic	4.7	25V	CEA 4R7P 25	
C24	Electrolytic	4.7	25V	CEA 4R7P 25	
C25	Electrolytic	2.2	25V	CSSA 2R2M 25	
C26	Electrolytic	2.2	25V	CSSA 2R2M 25	
C27	Electrolytic	47	10V	CEA 470P 10	
C28	Electrolytic	47	10V	CEA 470P 10	
C29	Mylar	0.012	50V	CQMA 123K 50	
C30	Mylar	0.012	50V	CQMA 123K 50	
C31	Electrolytic	100	35V	CEA 101P 35	

RESISTORS AND POTENTIOMETERS

Symbol	Description			Part No.	
R1	Metal oxide	150	2W	RS2P 151K	
R2	Metal oxide	150	2W	RS2P 151K	
R3	Carbon film	2.2k		RD¼PS 222J	
R4	Carbon film	2.2k		RD¼PS 222J	
R5	Carbon film	2.2k		RD¼PS 222J	
R6	Carbon film	2.2k		RD¼PS 222J	
R7	Carbon film	4.7k		RD¼PS 472J	
R8	Carbon film	4.7k		RD¼PS 472J	
R9	Carbon film	15k		RD¼PS 153J	
R10	Carbon film	15k		RD¼PS 153J	

Symbol	Description		Part No.	
R11	Carbon film	470k	RD¼PS 474J	
R12	Carbon film	470k	RD¼PS 474J	
R13	Carbon film	2.2k	RD¼PS 222J	
R14	Carbon film	2.2k	RD¼PS 222J	
R15	Carbon film	1.2M	RD¼PS 125J	
R16	Carbon film	1.2M	RD¼PS 125J	
R17	Carbon film	330k	RD¼PS 334J	
R18	Carbon film	330k	RD¼PS 334J	
R19	Carbon film	10k	RD¼PS 103J	
R20	Carbon film	10k	RD¼PS 103J	
R21	Carbon film	1.5k	RD¼PS 152J	
R22	Carbon film	1.5k	RD¼PS 152J	
R23	Carbon film	10k	RD¼PS 103J	
R24	Carbon film	10k	RD¼PS 103J	
R25	Carbon film	10k	RD¼PS 103J	
R26	Carbon film	10k	RD¼PS 103J	
R27	Carbon film	100	RD¼PS 101J	
R28	Carbon film	100	RD¼PS 101J	
R29	Carbon film	15k	RD¼PS 153J	
R30	Carbon film	15k	RD¼PS 153J	
R31	Carbon film	5.6k	RD¼PS 562J	
R32	Carbon film	5.6k	RD¼PS 562J	
R33	Carbon film	10k	RD¼PS 103J	
R34	Carbon film	10k	RD¼PS 103J	
R35	Carbon film	15k	RD¼PS 153J	
R36	Carbon film	15k	RD¼PS 153J	
R37	Carbon film	5.6k	RD¼PS 562J	
R38	Carbon film	5.6k	RD¼PS 562J	
R39	Carbon film	820k	RD¼PS 824J	
R40	Carbon film	820k	RD¼PS 824J	
R41	Carbon film	100k	RD¼PS 104J	
R42	Carbon film	100k	RD¼PS 104J	
R43	Carbon film	6.8k	RD¼PS 682J	
R44	Carbon film	6.8k	RD¼PS 682J	
R45	Carbon film	680	RD¼PS 681J	
R46	Carbon film	680	RD¼PS 681J	
R47	Carbon film	100k	RD¼PS 104J	
R48	Carbon film	100k	RD¼PS 104J	
R49	Carbon film	3.3k	RD¼PS 332J	
R50	Carbon film	3.3k	RD¼PS 332J	
R51	Carbon film	470k	RD¼PS 474J	
R52	Carbon film	470k	RD¼PS 474J	
R53	Carbon film	1k	RD¼PS 102J	
VR1	Variable resistor 250k-HB (BALANCE)		ACV-135-0	
VR2	Variable resistor 250k-B1 (VOLUME)		ACV-139-0	
VR3	Variable resistor 100k-B (BASS)		ACV-136-0	
VR4	Variable resistor 100k-B (TREBLE)		ACV-136-0	

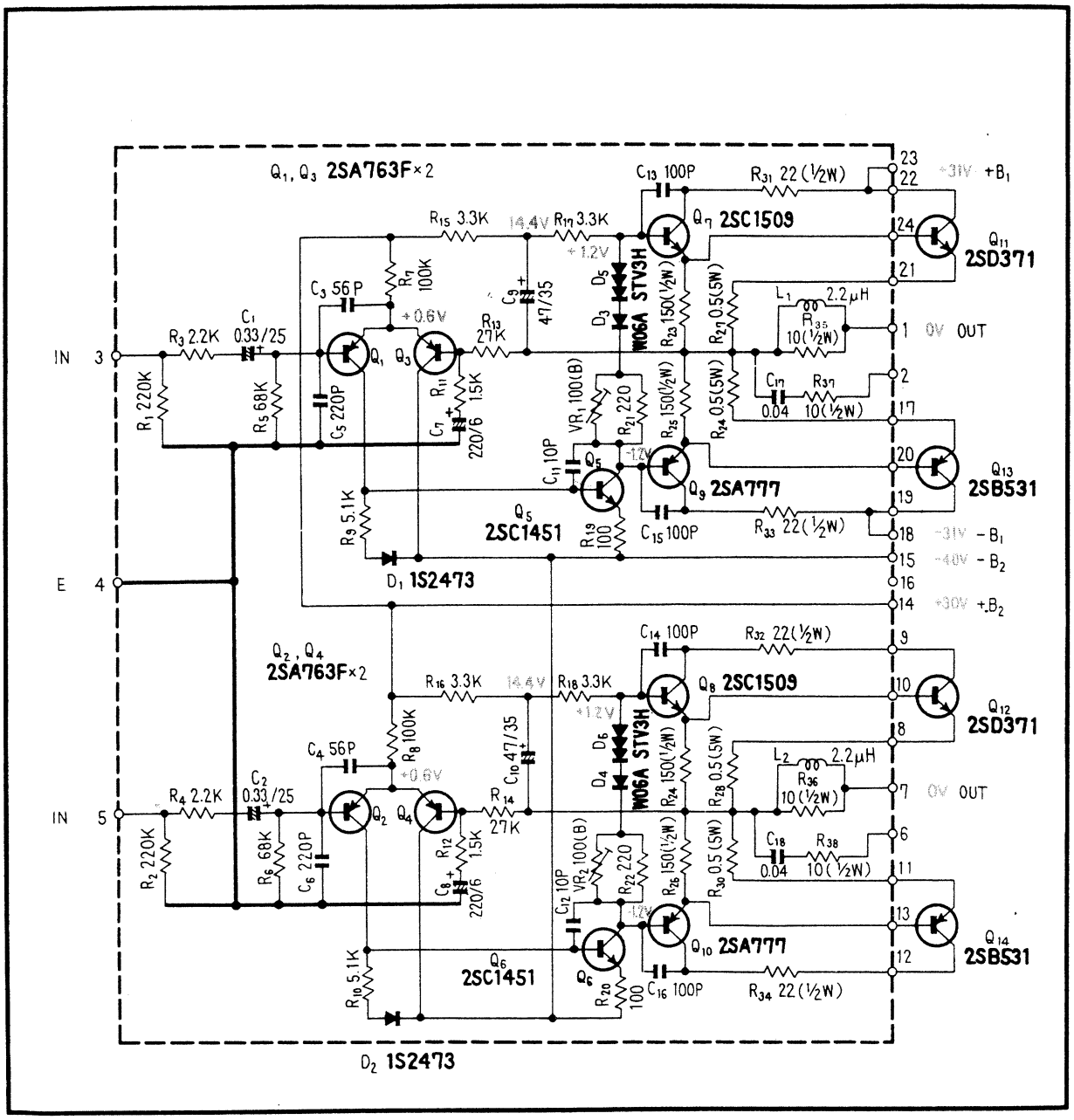
SEMICONDUCTORS

Symbol	Description	Part No.	
Q1	Transistor 2SA726-F or G		
Q2	Transistor 2SA726-F or G		
Q3	Transistor 2SC1344-E or F (2SC1312-E, F or G)		
Q4	Transistor 2SC1344-E or F (2SC1312-E, F or G)		
Q5	Transistor 2SC1344-E or F (2SC1312-E, F or G)		
Q6	Transistor 2SC1344-E or F (2SC1312-E, F or G)		

SWITCHES

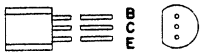
Symbol	Description	Part No.	
S1	Push switch (speaker)	ASG-073-0	
S2	Push switch (filter, mode)	ASG-073-0	
S3	Push switch (tape monitor, loudness)	ASG-074-0	

11.5 POWER AMPLIFIER ASSEMBLY (AWH-034-0)

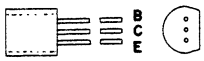


Foil Side (AWH-034-0)

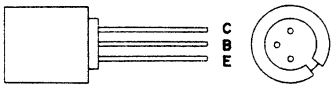
2SA640
2SA763F



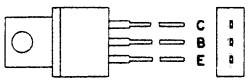
2SA726



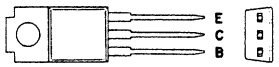
2SC1451



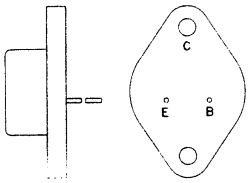
2SC1509
2SA777

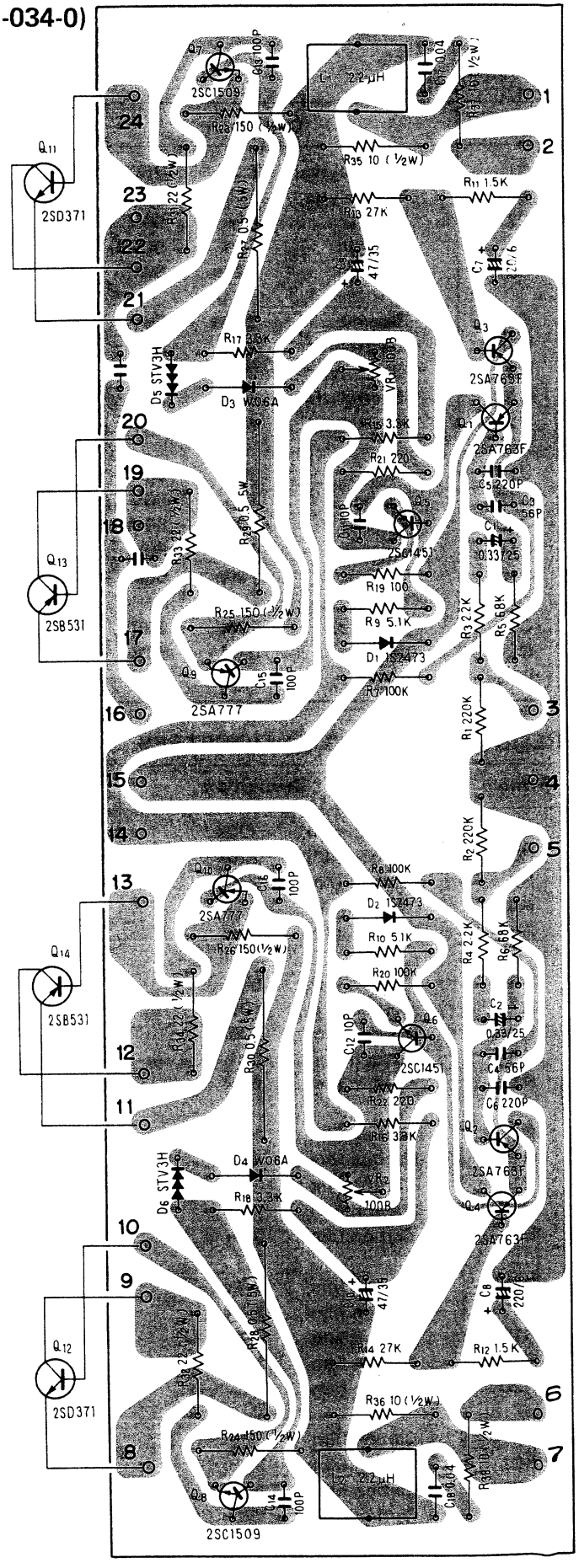


2SD356
2SB526



2SD371
2SC1030
2SB531
2SA756





Parts List of Power Amplifier Assembly (AWH-034-0)

CAPACITORS

Symbol	Description			Part No.	
C1	Electrolytic	0.33	25V	CSSA R33M 25	
C2	Electrolytic	0.33	25V	CSSA R33M 25	
C3	Ceramic	56p	50V	CCDSL 560K 50	
C4	Ceramic	56p	50V	CCDSL 560K 50	
C5	Ceramic	220p	50V	CCDSL 221K 50	
C6	Ceramic	220p	50V	CCDSL 221K 50	
C7	Electrolytic	220	6V	CEA 221P 6	
C8	Electrolytic	220	6V	CEA 221P 6	
C9	Electrolytic	47	35V	CEA 470P 35	
C10	Electrolytic	47	35V	CEA 470P 35	
C11	Ceramic	10p	50V	CCDSL 100F 50	
C12	Ceramic	10p	50V	CCDSL 100F 50	
C13	Ceramic	100p	50V	CCDSL 101K 50	
C14	Ceramic	100p	50V	CCDSL 101K 50	
C15	Ceramic	100p	50V	CCDSL 101K 50	
C16	Ceramic	100p	50V	CCDSL 101K 50	
C17	Ceramic	0.04	50V	CKDYF 403Z 50	
C18	Ceramic	0.04	50V	CKDYF 403Z 50	

RESISTORS AND POTENTIOMETERS

Symbol	Description			Part No.	
R1	Carbon film	220k		RD¼PS 224J	
R2	Carbon film	220k		RD¼PS 224J	
R3	Carbon film	2.2k		RD¼PS 222J	
R4	Carbon film	2.2k		RD¼PS 222J	
R5	Carbon film	68k		RD¼PS 683J	
R6	Carbon film	68k		RD¼PS 683J	
R7	Carbon film	100k		RD¼PS 104J	
R8	Carbon film	100k		RD¼PS 104J	
R9	Carbon film	5.1k		RD¼PS 512J	
R10	Carbon film	5.1k		RD¼PS 512J	
R11	Carbon film	1.5k		RD¼PS 152J	
R12	Carbon film	1.5k		RD¼PS 152J	
R13	Carbon film	27k		RD¼PS 273J	
R14	Carbon film	27k		RD¼PS 273J	
R15	Carbon film	3.3k		RD¼PS 332J	
R16	Carbon film	3.3k		RD¼PS 332J	
R17	Carbon film	3.3k		RD¼PS 332J	
R18	Carbon film	3.3k		RD¼PS 332J	
R19	Carbon film	100		RD¼PS 101J	
R20	Carbon film	100		RD¼PS 101J	
R21	Carbon film	220		RD¼PS 221J	
R22	Carbon film	220		RD¼PS 221J	
R23	Carbon film	150	½W	RD½PS 151J	
R24	Carbon film	150	½W	RD½PS 151J	
R25	Carbon film	150	½W	RD½PS 151J	

Symbol	Description	Part No.	
R26	Carbon film 150 ½W	RD½PS 151J	
R27	Wire wound 0.5 5W	RT5B 0R5K	
R28	Wire wound 0.5 5W	RT5B 0R5K	
R29	Wire wound 0.5 5W	RT5B 0R5K	
R30	Wire wound 0.5 5W	RT5B 0R5K	
R31	Carbon film 22 ½W	RD½PS 220J	
R32	Carbon film 22 ½W	RD½PS 220J	
R33	Carbon film 22 ½W	RD½PS 220J	
R34	Carbon film 22 ½W	RD½PS 220J	
R35	Carbon film 10 ½W	RD½PS 100J	
R36	Carbon film 10 ½W	RD½PS 100J	
R37	Carbon film 10 ½W	RD½PS 100J	
R38	Carbon film 10 ½W	RD½PS 100J	
VR1	Variable resistor 100-B, semi-fixed	C92-063-0	
VR2	Variable resistor 100-B, semi-fixed	C92-063-0	

SEMICONDUCTORS

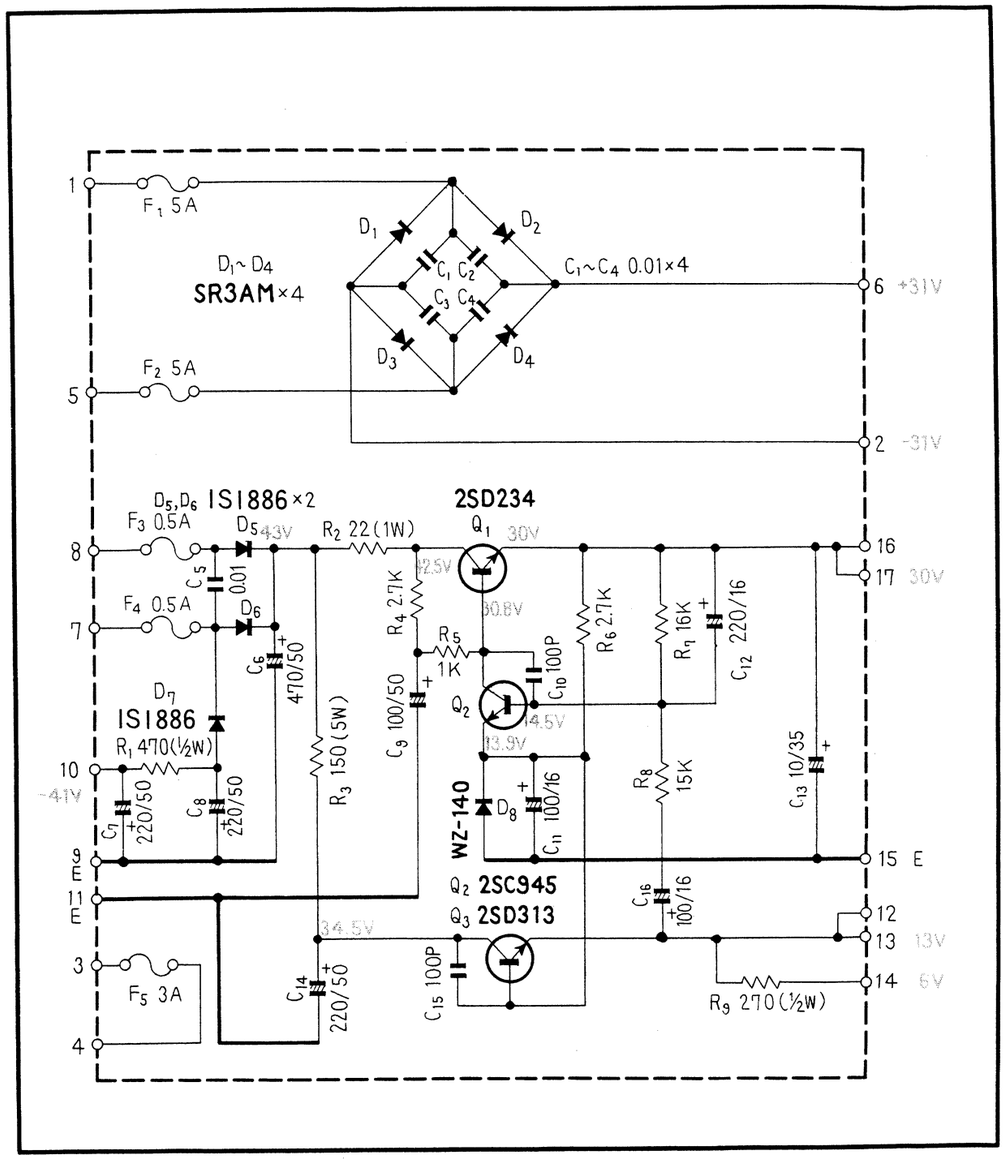
Symbol	Description	Part No.	
Q1	Transistor 2SA763F-6 or 5 (2SA726-F or G) (2SA640-K or L)		
Q2	Transistor 2SA763F-6 or 5 (2SA726-F or G) (2SA640-K or L)		
Q3	Transistor 2SA763F-6 or 5 (2SA726-F or G) (2SA640-K or L)		
Q4	Transistor 2SA763F-6 or 5 (2SA726-F or G) (2SA640-K or L)		
Q5	Transistor 2SC1451-G, B or V		
Q6	Transistor 2SC1451-G, B or V		
Q7	Transistor 2SC1509-Q or R (2SD356-D or C)		
Q8	Transistor 2SC1509-Q or R (2SD356-D or C)		
Q9	Transistor 2SA777-Q or R (2SB526-D or C)		
Q10	Transistor 2SA777-Q or R (2SB526-D or C)		
Q11	Transistor 2SD371-0, Y or R (2SC1030-B, C or A)		
Q12	Transistor 2SD371-0, Y or R (2SC1030-B, C or A)		
Q13	Transistor 2SB531-0, Y or R (2SA756-B, C or A)		
Q14	Transistor 2SB531-0, Y or R (2SA756-B, C or A)		
D1	Diode 1S2473		
D2	Diode 1S2473		
D3	Diode W06A		
D4	Diode W06A		
D5	Varistor STV3H		

Symbol	Description	Part No.	
D6	Varistor STV3H		

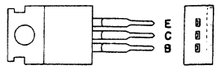
OTHERS

Symbol	Description	Part No.	
	AF choke coil Power transistor socket Spacer (insulator)	T63-009-0 AKH-001-0 AEC-076-0	

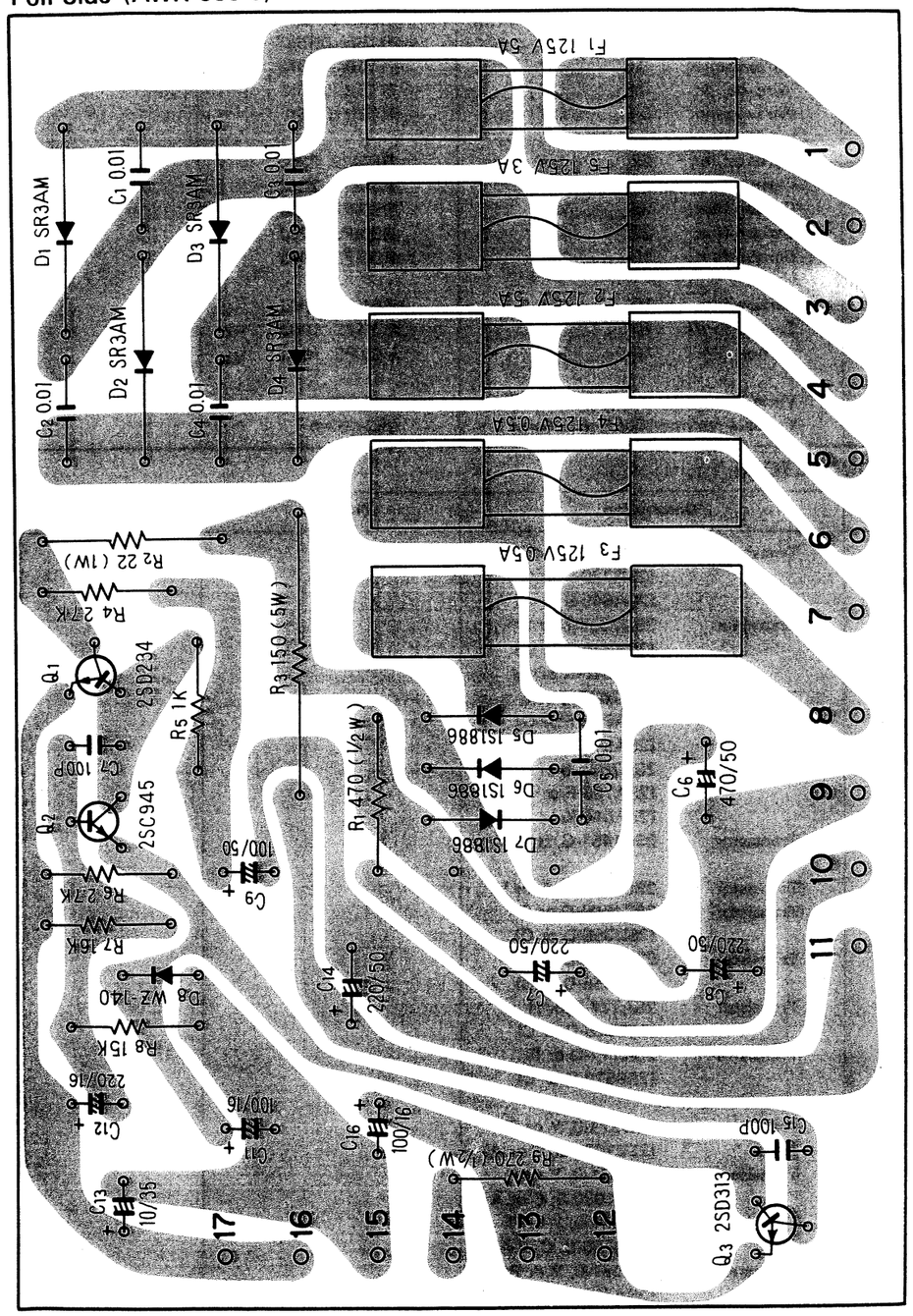
11.6 POWER SUPPLY CIRCUIT ASSEMBLY (AWR-060-0)



2SC945

2SD234
2SD313 

Foil Side (AWR-060-0)



Parts List of Power Supply Circuit Assembly (AWR-060-0)

CAPACITORS

Symbol	Description			Part No.	
C1	Ceramic	0.01	150V	ACG-004-0	
C2	Ceramic	0.01	150V	ACG-004-0	
C3	Ceramic	0.01	150V	ACG-004-0	
C4	Ceramic	0.01	150V	ACG-004-0	
C5	Ceramic	0.01	150V	ACG-004-0	
C6	Electrolytic	470	50V	CEA 471P 50	
C7	Electrolytic	220	50V	CEA 221P 50	
C8	Electrolytic	220	50V	CEA 221P 50	
C9	Electrolytic	100	50V	CEA 101P 50	
C10	Ceramic	100p	50V	CCDSL 101Z 50	
C11	Electrolytic	100	16V	CEA 101P 16	
C12	Electrolytic	220	16V	CEA 221P 16	
C13	Electrolytic	10	35V	CEA 100P 35	
C14	Electrolytic	220	50V	CEA 221P 50	
C15	Ceramic	100p	50V	CCDSL 101Z 50	
C16	Electrolytic	100	16V	CEA 101P 16	

RESISTORS

Symbol	Description			Part No.	
R1	Carbon film	470	½W	RD½PS 471J	
R2	Metal oxide	22	1W	RS1P 220K	
R3	Wire wound	150	5W	RT5B 151K	
R4	Carbon film	2.7k		RD¼PS 272J	
R5	Carbon film	1k		RD¼PS 102J	
R6	Carbon film	2.7k		RD¼PS 272J	
R7	Carbon film	16k		RD¼PS 163J	
R8	Carbon film	15k		RD¼PS 153J	
R9	Carbon film	270	½W	RD½PS 271J	

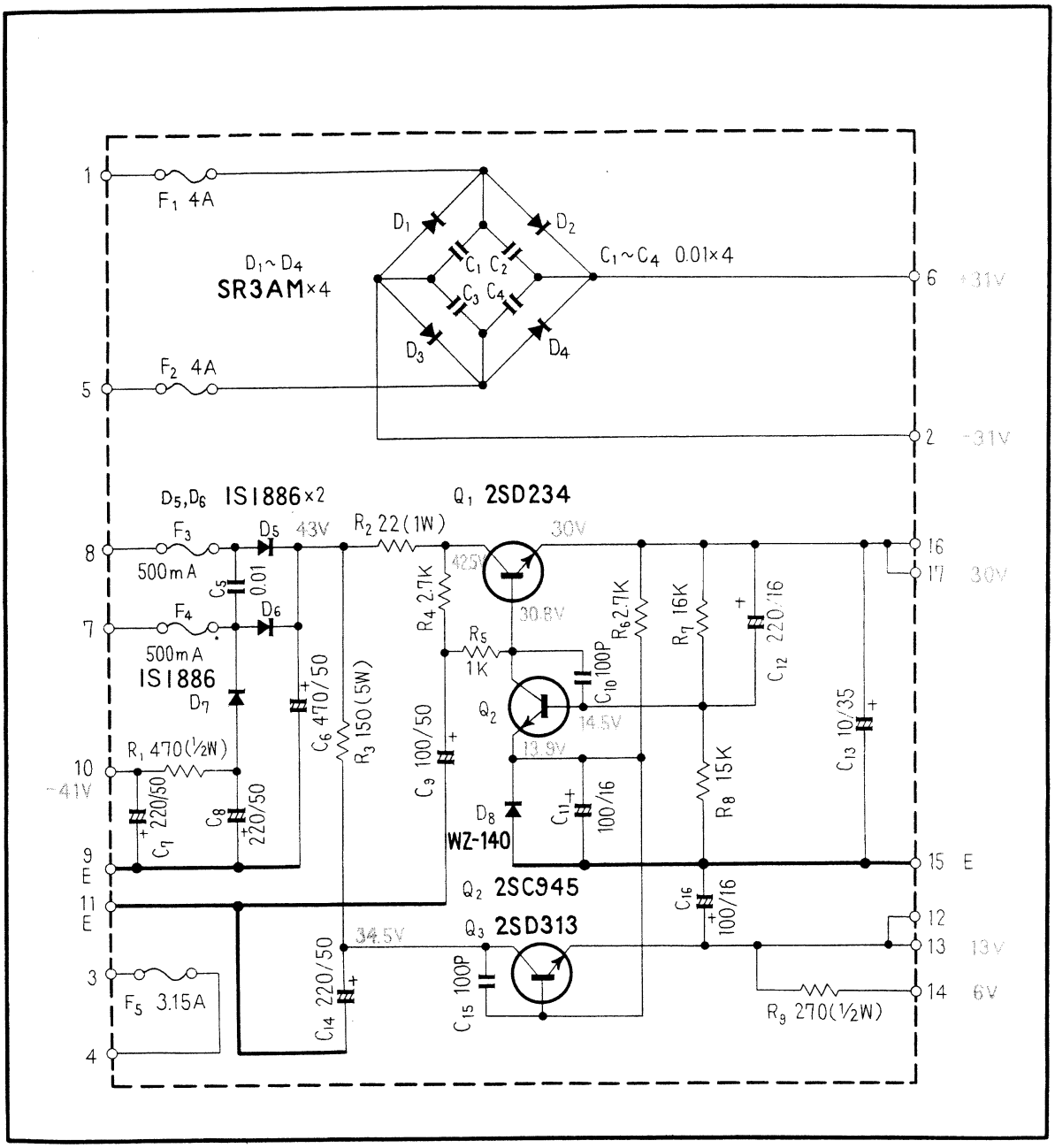
SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	Transistor	2SD234-O or Y		
Q2	Transistor	2SC945-Q or R		
Q3	Transistor	2SD313-D or E		
D1	Diode	SR3AM-4		
D2	Diode	SR3AM-4		
D3	Diode	SR3AM-4		
D4	Diode	SR3AM-4		
D5	Diode	1S1886 (SIB01-02)		
D6	Diode	1S1886 (SIB01-02)		
D7	Diode	1S1886 (SIB01-02)		
D8	Zener diode	WZ-140		

OTHERS

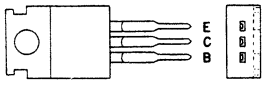
Symbol	Description	Part No.	
	Clip-in type fuse holder	AKR-013-0	
	Heat sink	ANH-117-0	

11.7 POWER SUPPLY CIRCUIT ASSEMBLY (AWR-061-0) FOR 220V ONLY MODEL

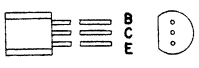


2SD234

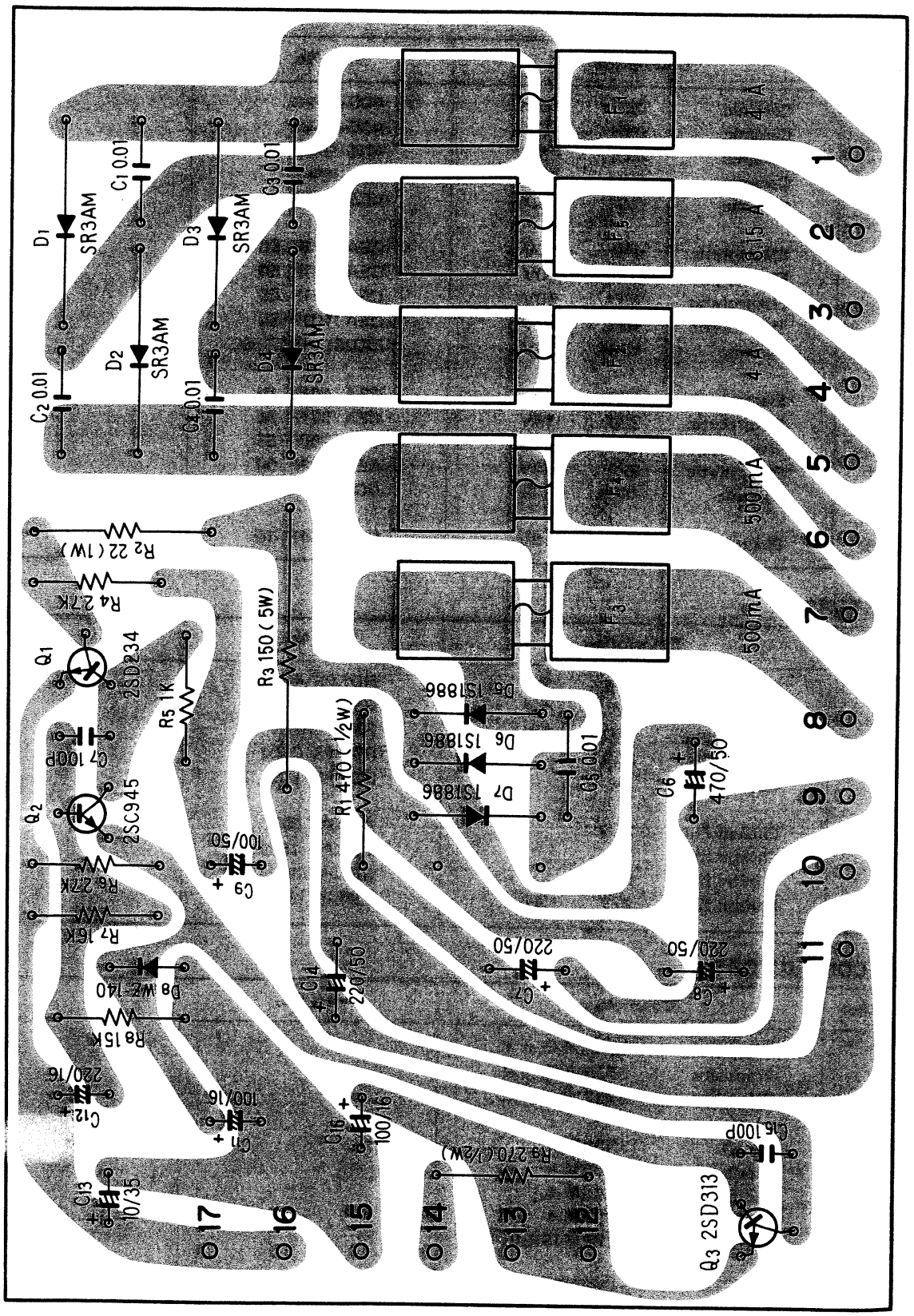
2SD313



2SC945



Foil Side (AWR-061-0)



Parts List of Power Supply Circuit Assembly (AWR-061-0) for 220V only model

CAPACITORS

Symbol	Description			Part No.	
C1	Ceramic	0.01	150V	ACG-004-0	
C2	Ceramic	0.01	150V	ACG-004-0	
C3	Ceramic	0.01	150V	ACG-004-0	
C4	Ceramic	0.01	150V	ACG-004-0	
C5	Ceramic	0.01	150V	ACG-004-0	
C6	Electrolytic	470	50V	CEA 471P 50	
C7	Electrolytic	220	50V	CEA 221P 50	
C8	Electrolytic	220	50V	CEA 221P 50	
C9	Electrolytic	100	50V	CEA 101P 50	
C10	Ceramic	100p	50V	CCDSL 101Z 50	
C11	Electrolytic	100	16V	CEA 101P 16	
C12	Electrolytic	220	16V	CEA 221P 16	
C13	Electrolytic	10	35V	CEA 100P 35	
C14	Electrolytic	220	50V	CEA 221P 50	
C15	Ceramic	100p	50V	CCDSL 101Z 50	
C16	Electrolytic	100	16V	CEA 101P 16	

RESISTORS

Symbol	Description			Part No.	
R1	Carbon film	470	½W	RD½PS 471J	
R2	Metal oxide	22	1W	RS1P 220K	
R3	Wire wound	150	5W	RT5B 151K	
R4	Carbon film	2.7k		RD¼PS 272J	
R5	Carbon film	1k		RD¼PS 102J	
R6	Carbon film	2.7k		RD¼PS 272J	
R7	Carbon film	16k		RD¼PS 163J	
R8	Carbon film	15k		RD¼PS 153J	
R9	Carbon film	270	½W	RD½PS 271J	

SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	Transistor	2SD234-O or Y		
Q2	Transistor	2SC945-Q or R		
Q3	Transistor	2SD313-D or E		
D1	Diode	SR3AM-4		
D2	Diode	SR3AM-4		
D3	Diode	SR3AM-4		
D4	Diode	SR3AM-4		
D5	Diode	1S1886 (SIB01-02)		
D6	Diode	1S1886 (SIB01-02)		
D7	Diode	1S1886 (SIB01-02)		
D8	Zener diode	WZ-140		

TUNER Ass'y AWE-046

Q1 3SK30

Q2 2SC535

CONNECTOR Ass'y AWX-062

EQUALIZER AMP Ass'y AWF-014

AF AMP Ass'y AWK-035

NOTES
- Neither switch (S_{11}) nor capacitors (C_8 & C_9) are provided for 220V unit.
- No switch (S_{11}) is provided for 120V unit but capacitors (C_8 & C_9) are provided.

C_{12} : 220V model and 5-LINE voltage model.

VR_1 : BALANCE CONTROL
VR_2 : VOLUME CONTROL

SWITCHES
- S_1 : FUNCTION — 1. AM, 2. FM, 3. PHONO/MIC, 4. AUX
- S_2 : FM MUTING — ON ⟷ OFF
- S_3 : POWER SWITCH — OFF ⟷ ON
- S_4 : TAPE MONITOR 1 — OFF ⟷ ON
- S_5 : TAPE MONITOR 2 — OFF ⟷ ON
- S_6 : MODE — STEREO ⟷ MONO
- S_7 : LOUDNESS — OFF ⟷ ON
- S_8 : HIGH FILTER — OFF ⟷ ON
- S_9 : SPEAKER A — OFF ⟷ ON
- S_{10} : SPEAKER B — OFF ⟷ ON
- S_{11} : DE-EMPHASIS — 50μs ⟷ 75μs

RESISTORS IN OH... OTHE...

CAPACITOR IN μF

NOTES
- V
- V ⇦ A

2SD356
2SB526

HA1137
HA1138

2SC1451

3SK30

HA1156

2SA777
2SC1509

LAMP ASS'Y AWX-072

DIAL SCALE LAMP 8V 300 mA x 5

PL_6 : SIGNAL METER LAMP(8V 300 mA)

PL_7 : TUNING METER LAMP (8V 300 mA)

DIAL POINTER LAMP (8V 50 mA)

S_1 - 1F

PL_8 AM, PL_9 FM, PL_{10} PHONO, PL_{11} AUX — POSITION LAMP

PL_{12} ST. IND. LAMP 6V 30 mA

TUNING METER

T. MET

SIGNAL METER

S_1 - 2R

S_1 - 2F

MUT AUTO OUT

FM S.MET

COMMON +B 19.5V

FM L OUT

FM R OUT

POWER SUPPLY ASS'Y AWR-060

Q_2 2SC945 Q_1 2SD234 D_5, D_6 SIB01 x2

WZ-140

D_7 SIB01

2SD313

$D_1 \sim D_4$ SR3AM x4

$C_1 \sim C_4$ 0.01 x4

30V, 8 mA, 9.5 mA, 6V 30 mA, 7.5 mA, 50 mA 31V, 50 mA -31V, 10 mA -41V

FUSE 1 5A, FUSE 2 5A, FUSE 3 0.5A, FUSE 4 0.5A, FUSE 5 3A

AC 7.5V

GREEN, BROWN, GREEN, RED, WHITE, RED, BLUE, BLUE — T_1 — YELLOW

FUSE 6 4A

S_3 OFF ⟷ ON

SWITCHED, UNSWITCHED

WHITE — AC OUTLETS

AC 120V 60Hz

POWER SUPPLY CIRCUIT FOR 220V MOD

POWER SUPPLY ASS'Y AWR-081

Q_2 2SC945 Q_1 2SD234 D_5, D_6 SIB01 x2

WZ-140

D_7 SIB01

2SD313

$D_1 \sim D_4$ SR3AM x4

$C_1 \sim C_4$ 0.01 x4

FUSE 1 4A, FUSE 2 4A, FUSE 3 500 mA, FUSE 4 500 mA, FUSE 5 3.15A

AC 7.5V

-41V

AF AMP ASS'Y AWK-035 ½

Q_1 Q_2 2SA726 x2 Q_3, Q_4 2SC1344 x2 Q_5, Q_6 2SC1344 x2

BALANCE CONTROL

VOLUME CONTROL

VR_3 : BASS CONTROL

VR_4 : TREBLE CONTROL

POWER AMP ASS'Y AWH-034

$Q_1 \sim Q_4$ 2SA763 x4 D_3, D_4 W06A x2 Q_7, Q_8 2SC1509 x2 Q_{11} 2SD371

Q_{13} 2SB531

Q_9, Q_{10} 2SA777 x2

Q_5, Q_6 2SC1451 x2

D_1, D_2 1S2473 x2

D_5, D_6 STV3H x2

Q_{12} 2SD371

Q_{14} 2SB531

31V +B, 0V OUT, -B1, -B2

AWK-035 ½

OFF ⟷ ON

F_6, F_7 : 3.15A fus

model and
NE voltage model.

ER B
⟷ ON

MPHASIS
s ⟷ 75μs

RESISTORS
IN OHM, ¼W, ±5% TOLERANCE UNLESS OTHERWISE NOTED. K=KΩ, M=MΩ.

CAPACITORS
IN μF UNLESS OTHERWISE NOTED. P=pF

NOTES
V : SIGNAL VOLTAGE NECESSARY FOR OBTAINING 28W/8Ω OUTPUT POWER (1KHz).
V : DC VOLTAGE AT NO INPUT SIGNAL.
⇦ A : DC CURRENT AT NO INPUT SIGNAL.

2SA777
2SC1509

2SD371
2SB531
2SA756
2SC1030

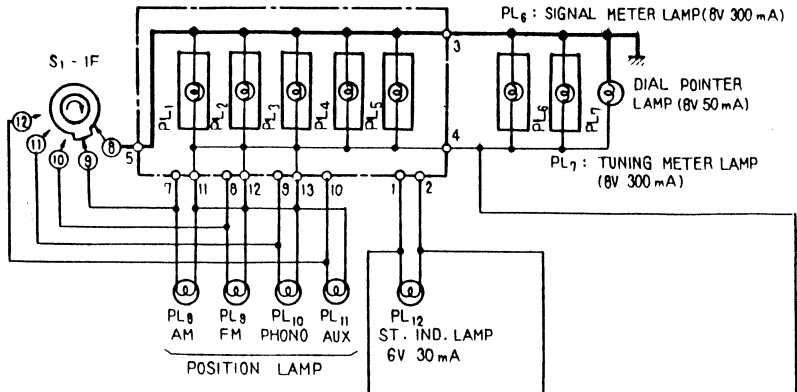
2SC535
2SC461
2SC1344

2SC945
2SA763P
2SA763
2SA640

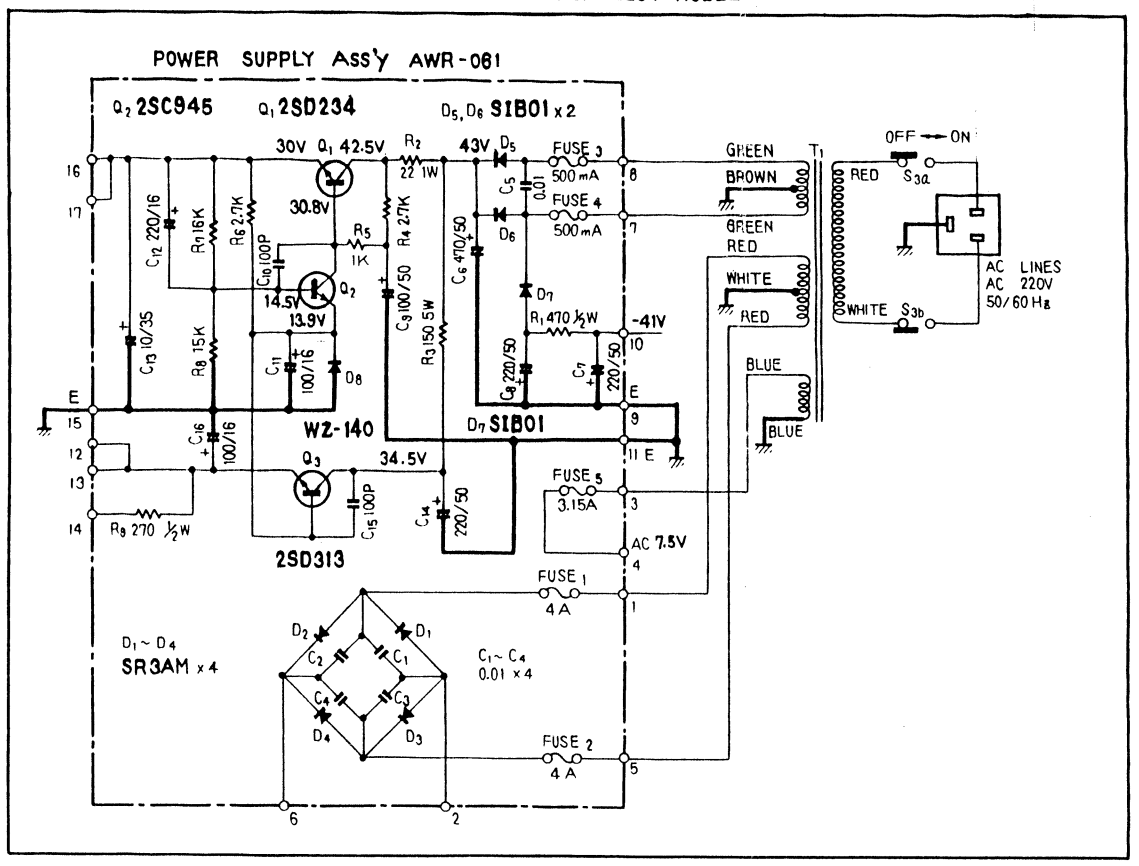
2SA725
2SA726
2SC1312

2SD234
2SD313

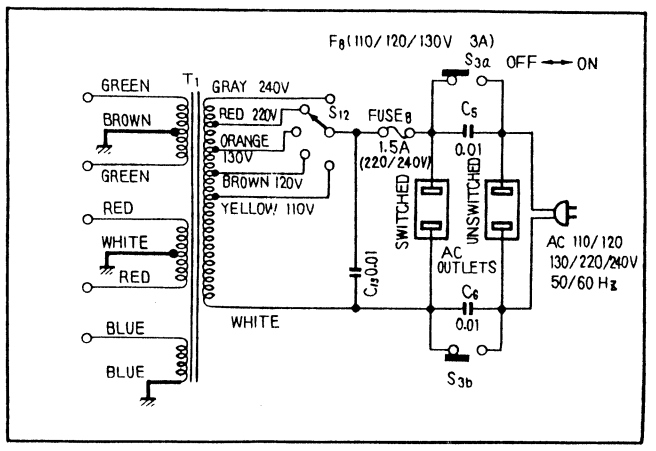
LAMP ASS'Y AWX-072


DIAL SCALE LAMP 8V 300 mA x 5
PL6 : SIGNAL METER LAMP(8V 300 mA)
S1 - 1F
DIAL POINTER LAMP (8V 50 mA)
PL7 : TUNING METER LAMP (8V 300 mA)
PL8 AM
PL9 FM
PL10 PHONO
PL11 AUX
POSITION LAMP
PL12 ST. IND. LAMP 6V 30 mA

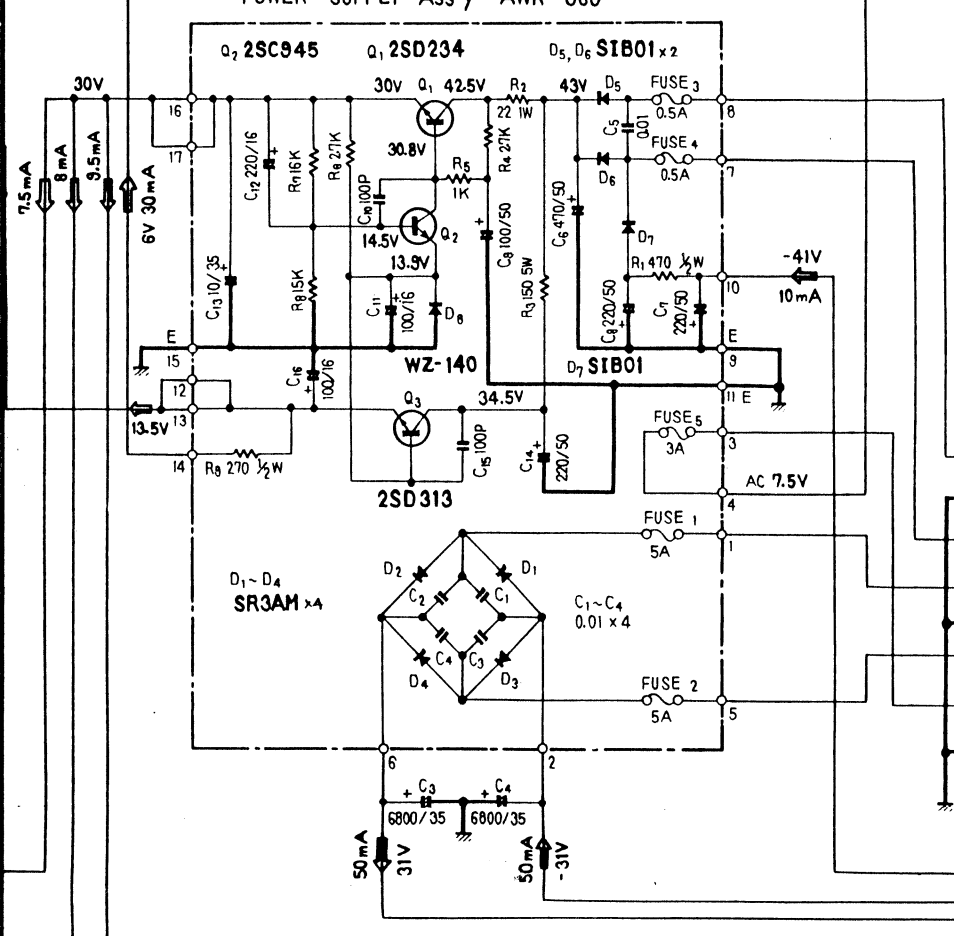
POWER SUPPLY CIRCUIT FOR 220V MODEL



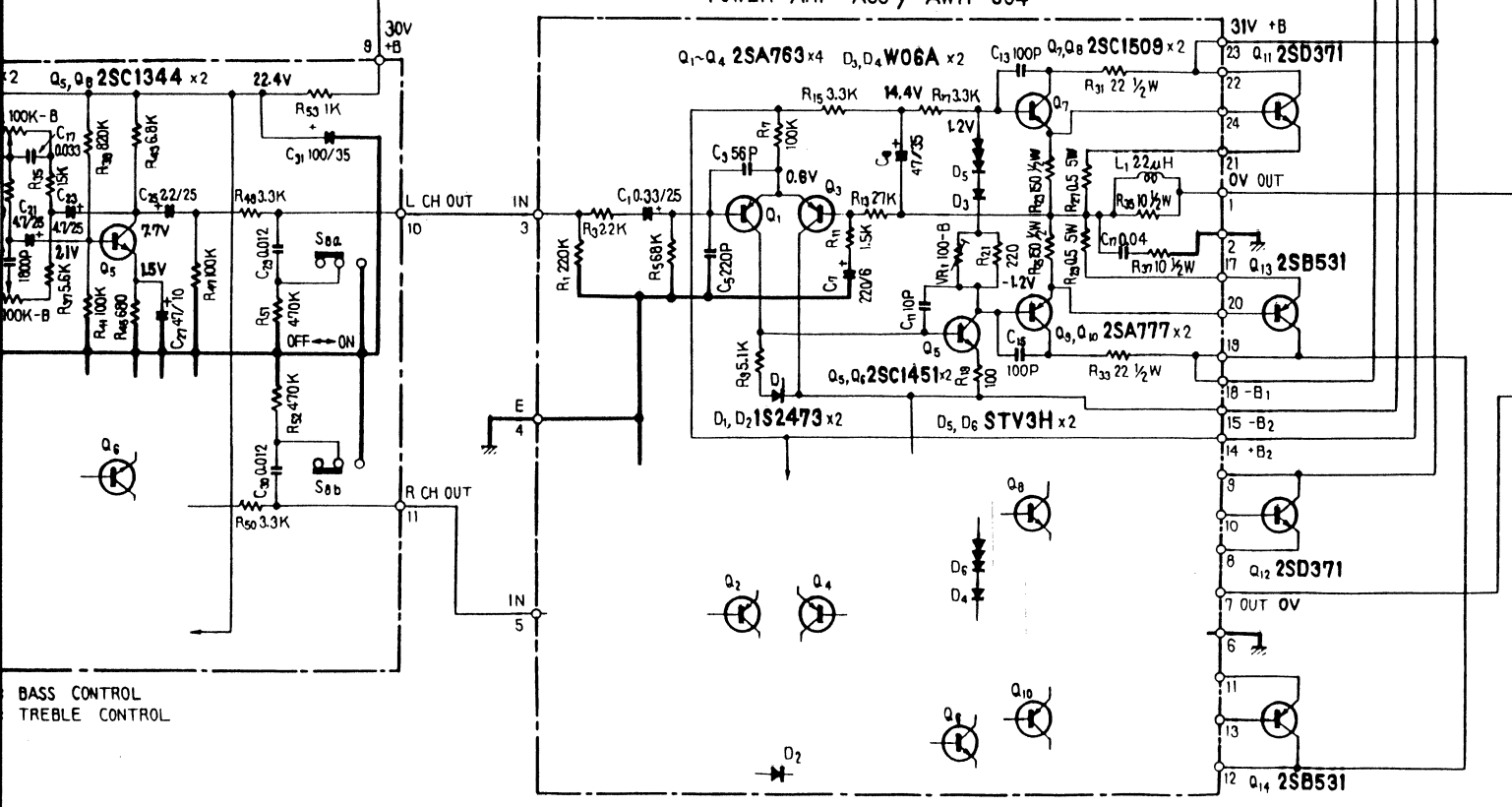
POWER SUPPLY CIRCUIT FOR 5-LINE VOLTAGE MODEL



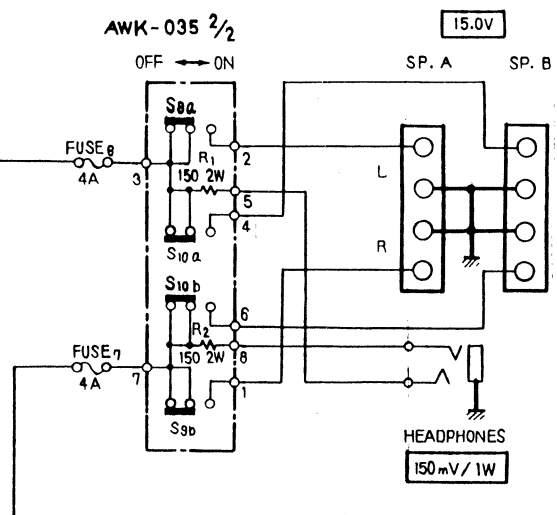
POWER SUPPLY ASS'Y AWR-060



POWER AMP ASS'Y AWH-034



AWK-035 2/2



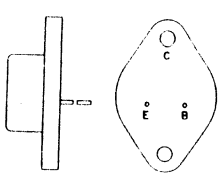
F6, F7 : 3.15A fuse used for 220V model only.

% TOLERANCE UNLESS
. K=kΩ, M=MΩ.

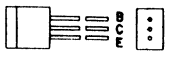
THERWISE NOTED. P=pF

LTAGE NECESSARY FOR OBTAINING
UTPUT POWER (1KHz).
E AT NO INPUT SIGNAL.
T AT NO INPUT SIGNAL.

D371
B531
A756
C1030



2SC535
2SC461
2SC1344



2SC945
2SA763P
2SA763
2SA640

2SA725
2SA726
2SC1312

2SD234
2SD313